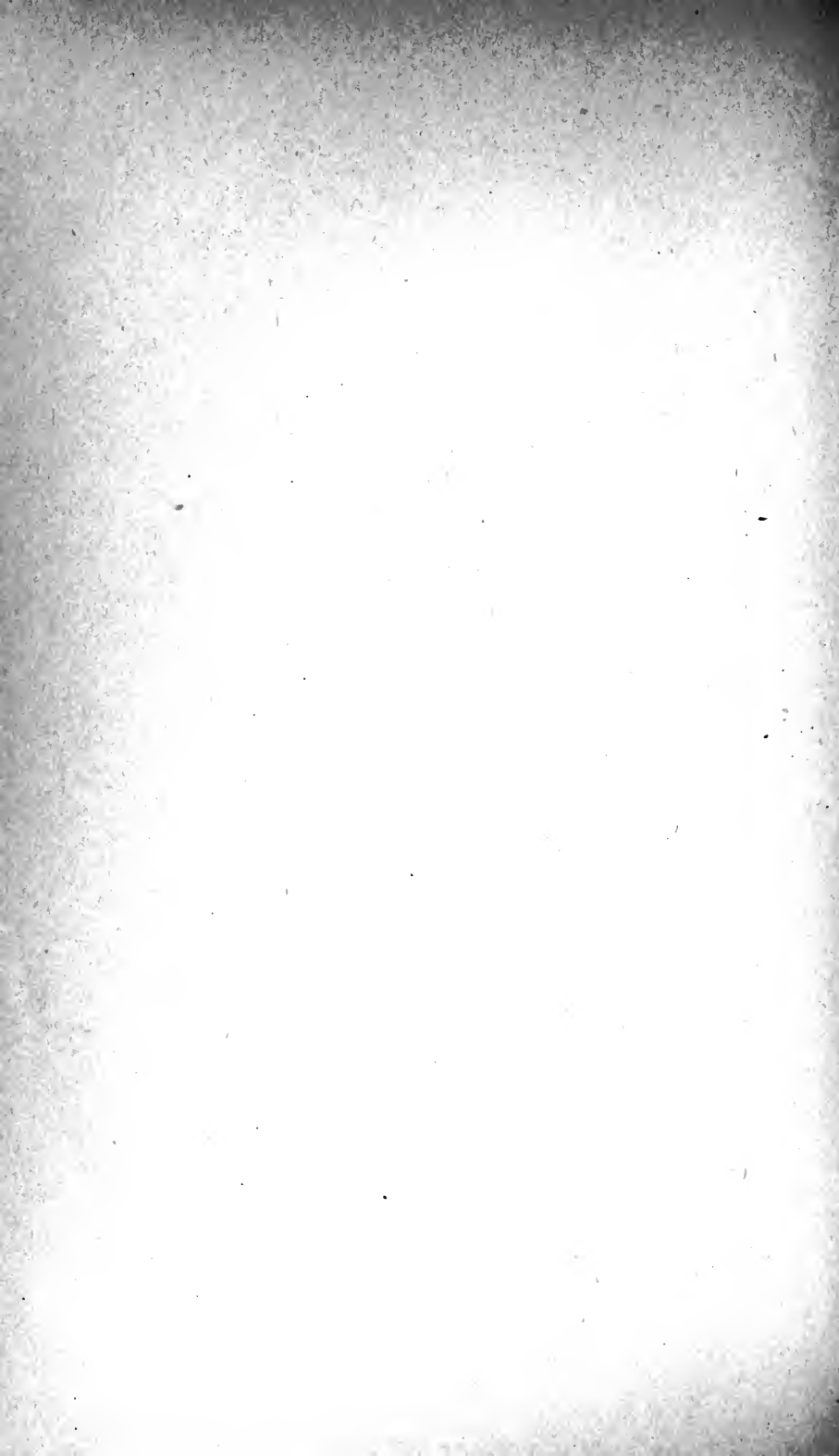


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ANNUAL REPORT

OF THE


SAINT PAUL

[MINNESOTA]

CHAMBER OF COMMERCE

FOR THE

YEAR ENDING DEC. 31, 1886.



GLOBE JOB OFFICE,
D. RAMALEY & SON, PRINTERS,
1887.

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OF THE
SAINT PAUL
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ANNUAL REPORT OF SECRETARY

OF THE

ST. PAUL CHAMBER OF COMMERCE

CHAMBER OF COMMERCE, SECRETARY'S OFFICE, }
ST. PAUL, Jan. 1, 1887. }

To the Board of Directors of the St. Paul Chamber of Commerce :

GENTLEMEN:—I have the honor to submit herewith the facts and figures which attest the growth and progress of this city for the year ending December 31, 1886.

An examination and comparison of these statistical statements with those of preceding years will show far more conclusively than words can express a degree of advancement that has few, if any, parallels in this or any other country.

CAUSES OF DEVELOPMENT.

The causes of this marvelous development are twofold, and have been so frequently discussed that an elaborate

statement of them here is unnecessary. It is sufficient to say that they are the result of both natural and acquired conditions, the bounty of Nature, reinforced by intelligence, energy and enterprise of man. Natural forces are constant in their operation, and their influence will be felt through all time. Hence the manifold advantages of a good location being assumed, the problem of building up a great and prosperous city is a work of human foresight, enterprise and public spirit. In these days, therefore, when rivalry is sharp and when competition is aggressive beyond all precedent the question of commercial supremacy must be determined by the predominance and persistence of the *human will*. Individual enterprise, stimulated by private interest, accomplishes much in promoting the general growth and prosperity. Organized efforts directed to wise, definite and comprehensive ends will accomplish still more.

INDIVIDUAL AND ASSOCIATED EFFORTS.

The combination of natural and acquired advantages, and of individual and associated efforts efficiently and persistently directed to the end of securing the "good of each and the good of all," is the key to the whole situation. St. Paul possesses commanding natural advantages. She is favored with a fortunate location at the head of one of the two great water ways on the continent and in close proximity to the other, with a healthful climate; with an extended and phenomenally rich tributary territory teeming with every variety of resources needed to stimulate production, exchange and distribution, with a railway system affording every facility for communication between itself and the utmost boundaries of the territory from which it must receive and to which it must pay tribute. There is in fact scarcely an element wanting in the circumstances of location, surroundings, raw materials and means of transit to make St. Paul a commercial metropolis of the first magnitude.

With her intellectual and enterprising population and her great wealth, there is only needed that organized, united and well-directed effort to fulfil the conditions essential to the highest success. The promotion of urban development by systematic effort, as implied in the careful collection and distribution of facts and statistics, by correspondence, by personal and financial aid and encouragement, by preliminary negotiation, and the bringing together of skill, experience and capital, is a specialty, and has become a recognized and important agency among modern cities seeking to promote their highest prosperity or competing for the prize of commercial supremacy. The cities which avail themselves of this agency, skillfully and wisely handled, and liberally supported have one of the best guarantees of rapid and substantial growth and of the most enduring prosperity.

MANUFACTURES.

The practical value of such a special agency has become signally demonstrated by the experience of the past year in St. Paul. The determination of this Chamber near the close of the year 1885 to give particular attention to the encouragement of manufacturing industries here has produced the most striking and satisfactory results. Numerous enterprises from distant places have been attracted hither by a careful presentation of our advantages, by a wide diffusion of information and by patient preliminary negotiations that have resulted in bringing together manual skill, tried experience and valuable machinery and appliances on the one hand, and increased financial strength on the other. These transactions were of course preceded by a careful consideration of the local and general intrinsic advantages of this city as a receiving and distributing center.

The aggregate addition to the manufacturing capital of St. Paul during the year amounts to more than \$4,000,000. The results of this movement will begin to appear in the

volume of the manufactured products of the next year, but it will probably require several years to develop the full effect of the judicious efforts put forth in 1886. Inasmuch as the results referred to are the outcome of a new departure made in the interest of a great manufacturing development, I have deemed it proper to make a special note of it here as a suggestion toward a permanent policy for the future. It has been the characteristic feature of the work of this Chamber during the year just closed. Do not its beneficent results warrant the conclusion that it will be wise to make liberal and permanent provision for its continuance in the future?

As the value of the reports of this organization depends upon their statistical information rather than upon any elaborate discussion or comments upon the figures indicative of the city's progress, such statistics are herewith submitted in an order corresponding somewhat with that of previous reports to afford a convenient basis for comparison. From the tables appended hereto it will be seen that there has been a gratifying increase in every direction that is indicative of growth in wealth, population, trade and general prosperity.

Respectfully submitted.

WM. F. PHELPS,

Secretary.



THE TEN STORY FIRE-PROOF BUILDING OF THE SAINT PAUL GLOBE.

POPULATION.

Estimating the population for the past year upon the basis of the names in the Directory, and employing the usual ratio, the number of people in St. Paul at the close of the year 1886 was as stated below. The table shows the growth from the beginning, in 1838 :

| Year. | Population. | Year. | Population. |
|-----------|-------------|-----------|-------------|
| 1838..... | 3 | 1872..... | 25,500 |
| 1847..... | 50 | 1873..... | 27,023 |
| 1849..... | 400 | 1875..... | 33,178 |
| 1850..... | 850 | 1880..... | 41,498 |
| 1855..... | 4,400 | 1881..... | 50,900 |
| 1856..... | 5,630 | 1882..... | 75,835 |
| 1857..... | 9,973 | 1883..... | 88,378 |
| 1860..... | 10,600 | 1884..... | 99,322 |
| 1865..... | 13,210 | 1885..... | 111,397 |
| 1870..... | 20,300 | 1886..... | 125,000 |
| 1871..... | 24,200 | | |

MORTALITY STATISTICS, 1886.

The following statement, in tabular form, shows our population and death-rate for a period of five years :

| Year. | Estimated Population. | Total No. of Deaths. | Death Rate. |
|------------|--------------------------|-------------------------|-------------|
| 1882 | 80,000 | 1,322 | 16.52 |
| 1883 | 90,000 | 1,303 | 14.40 |
| 1884 | 100,000 | 1,567 | 15.67 |
| 1885 | 111,397 | 1,346 | 12.08 |
| 1886 | 125,000 | 1,519 | 12.15 |

The table indicates not only an abnormal lowness of the death-rate, but its progressive decline.

COMPARISON WITH FORMER YEARS.

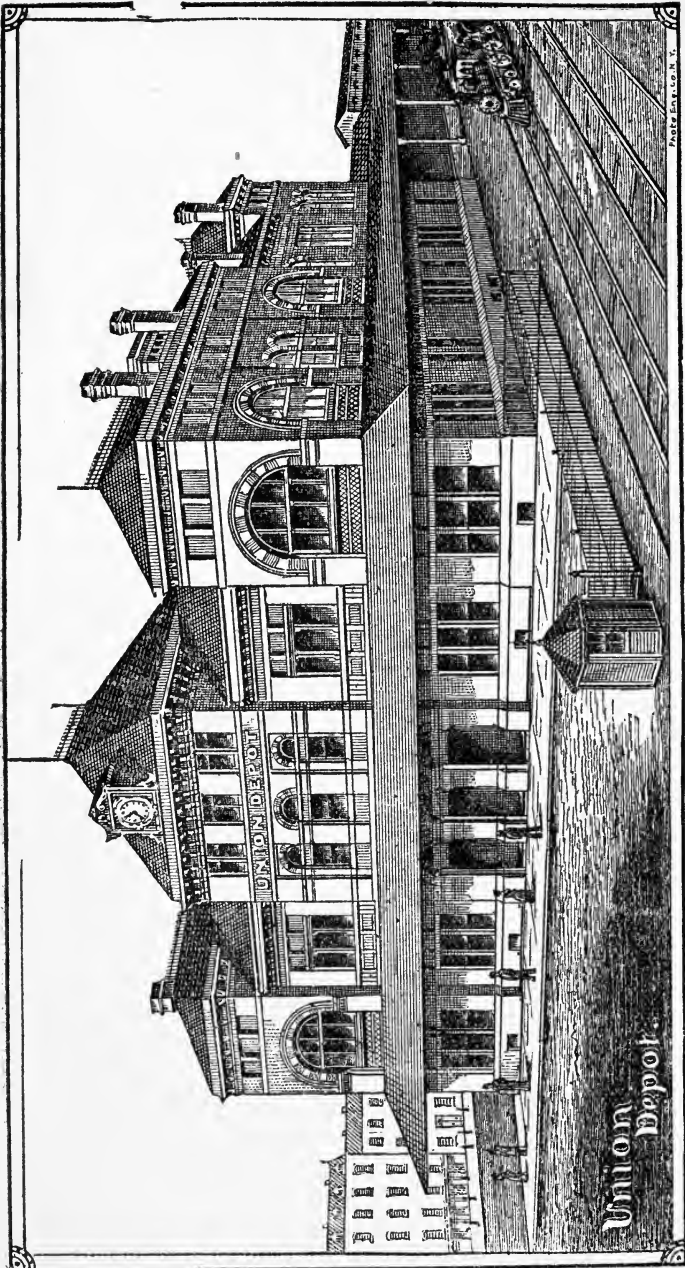
| Year. | Population. | Deaths. | Rate per 1,000. |
|------------|-------------|---------|--------------------|
| 1870 | 20,300 | 298 | 17.60 |
| 1871 | 23,000 | 660 | 12.95 |
| 1872 | 28,000 | 553 | 23.53 |
| 1873 | 29,000 | 564 | 18.03 |
| 1874 | 31,000 | 443 | 18.19 |
| 1875 | 33,300 | 448 | 13.41 |
| 1876 | 35,000 | 455 | 13.00 |
| 1877 | 36,600 | 429 | 11.72 |
| 1878 | 38,200 | 447 | 11.60 |
| 1879 | 39,800 | 513 | 12.88 |
| 1881 | 50,900 | 1,048 | 20.59 |
| 1882 | 75,835 | 1,222 | 16.11 |
| 1883 | 100,000 | 1,279 | 12.79 |
| 1884 | 110,000 | 1,548 | 14.66 |
| 1885 | 111,397 | 1,570 | 11.31 |
| 1886 | 125,000 | 1,519 | 12.15 |

STATEMENT OF MORTALITY IN THE CITY OF ST. PAUL

For the year commencing Nov. 1, 1885, and ending Oct. 31, 1886, giving age, color, sex and social relations.

| MONTHS ENDING | Age of Decedents. | | | | | | | | Color. | | Sex. | | Social Relations. | | | 1886/1885 | | 1886 | | 1885 | | Deaths in public institutions. | | Deaths exclusive of those in public institutions. | | Deaths by violence. | | | | |
|--|-------------------|---------------|--------------------|----------------|-----------------|-----------------|-----------------|------------------|----------|--------|----------|--------|-------------------|----------|----------|-----------|-------------------------|----------------------|---|----------------------|--------------------------------|---|------------|---|------------|---------------------|-------|-------|-------|-------|
| | Under 1 year. | 1 to 5 years. | Total under 5 yrs. | 5 to 20 years. | 20 to 40 years. | 40 to 60 years. | 60 to 80 years. | 80 to 100 years. | Unknown. | White. | Colored. | Males. | Females. | Married. | Widowed. | Single. | Deaths from all causes. | Corresponding Month. | Monthly death rate per 1,000 per annum. | Corresponding Month. | Deaths in public institutions. | Deaths exclusive of those in public institutions. | Accidents. | Suicides. | Homicides. | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| November, 1885..... | 20 | 13 | 33 | 9 | 31 | 9 | 7 | 3 | 2 | 93 | 1 | 50 | 44 | 24 | 9 | 61 | 94 | 109 | 9.02 | 11.65 | 11 | 83 | 4 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| December..... | 25 | 25 | 50 | 11 | 20 | 8 | 11 | 2 | 1 | 101 | 2 | 50 | 53 | 25 | 5 | 73 | 103 | 99 | 9.88 | 10.66 | 6 | 97 | 2 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| January, 1886..... | 30 | 19 | 49 | 10 | 16 | 19 | 9 | 4 | ..... | 105 | 2 | 57 | 50 | 26 | 5 | 76 | 107 | 94 | 10.27 | 10.12 | 4 | 103 | 6 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| February..... | 24 | 16 | 40 | 11 | 25 | 8 | 8 | 3 | ..... | 93 | 2 | 56 | 39 | 21 | 8 | 66 | 95 | 100 | 9.12 | 10.77 | 6 | 89 | 2 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| March..... | 26 | 19 | 45 | 14 | 20 | 16 | 5 | 1 | ..... | 100 | 1 | 49 | 52 | 22 | 5 | 74 | 101 | 100 | 9.70 | 10.77 | 14 | 87 | 3 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| April..... | 25 | 20 | 45 | 13 | 32 | 10 | 12 | 4 | ..... | 112 | 4 | 56 | 60 | 34 | 13 | 69 | 116 | 83 | 11.14 | 8.94 | 10 | 106 | 11 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| May..... | 25 | 14 | 39 | 13 | 21 | 13 | 12 | ..... | 1 | 96 | 3 | 59 | 40 | 29 | 6 | 64 | 99 | 98 | 9.50 | 10.55 | 14 | 85 | 6 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| June..... | 51 | 17 | 68 | 8 | 18 | 6 | 3 | 1 | ..... | 101 | 3 | 60 | 44 | 15 | 4 | 85 | 104 | 82 | 9.98 | 8.83 | 10 | 94 | 10 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| July..... | 126 | 20 | 146 | 12 | 18 | 9 | 8 | 2 | 1 | 193 | 3 | 101 | 95 | 20 | 11 | 165 | 196 | 200 | 18.80 | 21.64 | 11 | 185 | 9 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| August..... | 71 | 36 | 107 | 22 | 25 | 9 | 8 | 2 | ..... | 171 | 2 | 88 | 85 | 25 | 3 | 145 | 173 | 151 | 16.61 | 16.26 | 12 | 101 | 9 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| September..... | 54 | 31 | 85 | 12 | 24 | 16 | 11 | 4 | 4 | 156 | ..... | 81 | 75 | 6 | ..... | 150 | 156 | 131 | 14.98 | 14.11 | 10 | 146 | 4 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| October..... | 63 | 28 | 91 | 28 | 27 | 14 | 13 | 1 | 1 | 174 | 1 | 89 | 86 | 9 | 1 | 165 | 175 | 99 | 16.80 | 10.66 | 15 | 169 | 9 | ..... | ..... | ..... | ..... | ..... | ..... |  |
| Total, 12 months..... | 540 | 258 | 798 | 163 | 277 | 137 | 107 | 27 | 10 | 1495 | 24 | 796 | 723 | 256 | 70 | 1193 | 1519 | 1346 | 145.80 | 144.96 | 123 | 1396 | 75 | 10 | | | | | | |
| Annual death rate per 1,000, 1886, 12.15; 1885, 12.08. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Annual death rate per 1,000, 1886, 12.15; 1885, 12.08.



UNION DEPOT.

THE METEOROLOGICAL RECORD FOR 1886.

The weather indications for the past year have been characterized by a deficiency in the precipitation of moisture unparalleled during the past 16 years, the total rainfall being only 21.89 inches as shown in the last of the series of tables appended. The average for the period named is 27.81 inches, and the maximum 39.16 inches in 1881. The average cloudiness on a scale of zero to 10, the former representing a perfectly clear sky and ten an entirely cloudy one, was 4.8. The average for the past 16 years is 5.0. Respecting the temperature, the year was cooler than the average. The mean was 42.6 degrees, and the average 44.2 degrees. The year 1886 was warmer than any year since 1870, the mean being 48.5 and 39.8. The subjoined tables, kindly furnished by signal officer Lyons, are interesting and will prove useful for comparison hereafter.

ANNUAL MEANS, 1886.

| Month. | Barometer corrected to sea level and gravity. | | | Temperature. | | | | |
|----------------|---|----------|---------|--------------|---------|-------|--------|-------|
| | Mean. | Highest. | Lowest. | Mean. | High'st | Date. | Lowest | Date. |
| January | 30.166 | 30.574 | 29.684 | 4.1 | 30.0 | 1st. | —33.9 | 23d |
| February..... | 30.074 | 30.686 | 29.490 | 15.0 | 49.0 | 7th. | —28.1 | 2d |
| March..... | 30.021 | 30.618 | 29.475 | 27.5 | 58.0 | 24th. | — 9.8 | 2d |
| April..... | 29.984 | 30.390 | 29.356 | 49.2 | 81.3 | 21st. | 13.5 | 2d |
| May..... | 29.909 | 30.244 | 29.501 | 59.5 | 84.3 | 22d. | 33.2 | 16th |
| June..... | 29.933 | 30.213 | 29.639 | 65.0 | 90.6 | 11th. | 42.8 | 3d |
| July..... | 28.929 | 30.204 | 29.658 | 72.7 | 94.0 | 6th. | 54.7 | 14th |
| August..... | 29.929 | 30.217 | 29.694 | 69.6 | 94.2 | 12th. | 42.1 | 31st |
| September..... | 29.951 | 30.274 | 29.498 | 58.2 | 88.1 | 6th. | 33.0 | 30th |
| October..... | 30.079 | 30.657 | 29.459 | 52.9 | 82.0 | 7th. | 20.9 | 27th |
| November..... | 29.987 | 30.478 | 29.168 | 27.9 | 73.6 | 1st. | — 3.3 | 29th |
| December..... | 30.190 | 30.859 | 29.645 | 8.4 | 42.7 | 9th. | —23.7 | 27th |
| Sums..... | 360.152 | | | 510.9 | | | | |
| Means..... | 30.001 | | | 42.6 | | | | |

NOTE—Wherever the sign (—) appears in connection with temperature, it signifies below zero.

WIND DIRECTION.

| 1886. Month. | Wind— Total Num'b'r Miles. | Wind Direction—Number of times observed blowing from points determined from the 6 A. M., 2 P. M. and 10 P. M. tri-daily observations. | | | | | | | | | | High'st Velocity. | Direc- tion. | Date. |
|-----------------|-------------------------------------|---|----|-----|-----|----|----|-----|-----|-----|----|----------------------|-----------------|-------|
| | | N | NE | E | SE | S | SW | W | NW | C'm | | | | |
| January | 4,633 | 3 | 6 | 9 | 11 | 3 | 4 | 21 | 29 | 7 | 24 | NW | 4th. | |
| February..... | 4,791 | 3 | 5 | 7 | 17 | 6 | 3 | 22 | 11 | 10 | 26 | W | 24th. | |
| March..... | 4,682 | 8 | 8 | 9 | 11 | 14 | 3 | 10 | 25 | 15 | 36 | W | 25th. | |
| April..... | 5,130 | 4 | 5 | 17 | 21 | 4 | 7 | 5 | 12 | 15 | 28 | SE | 14th. | |
| May..... | 4,454 | 3 | 8 | 6 | 9 | 8 | 12 | 11 | 22 | 14 | 28 | SW | 13th, 23d. | |
| June..... | 4,261 | 7 | 3 | 9 | 10 | 10 | 7 | 5 | 24 | 15 | 37 | NW | 21st. | |
| July..... | 4,117 | 11 | 8 | 12 | 12 | 13 | 2 | 7 | 18 | 11 | 32 | S | 4th. | |
| August..... | 4,842 | 2 | 9 | 13 | 17 | 7 | 7 | 12 | 23 | 3 | 31 | W | 21st. | |
| September..... | 5,393 | 1 | 0 | 20 | 18 | 13 | 9 | 14 | 7 | 8 | 32 | W | 16th. | |
| October..... | 4,483 | 4 | 3 | 20 | 17 | 15 | 3 | 5 | 11 | 15 | 29 | S | 19th. | |
| November..... | 6,105 | 2 | 5 | 11 | 11 | 7 | 7 | 22 | 15 | 10 | 35 | W | 5th. | |
| December..... | 3,978 | 1 | 7 | 11 | 12 | 3 | 12 | 10 | 29 | 8 | 21 | NW | 14th. | |
| Sums..... | 56,569 | 49 | 67 | 144 | 156 | 63 | 76 | 143 | 226 | 131 | | | | |

The average monthly movement of the wind for the year was 4.71 miles and the prevailing direction was northwest.

CLOUDINESS AND STAGE OF WATER IN RIVER.

| Month. | Number of Days. | | | | Amount cloudi- ness—Scale 0 to 10; 0 cl'r, 10 cl'dy. | | | | | | Mean relative humidity. Rain and m't'd snow in inches and hun- dredths. | River—Stage of in ft and tenths. | | | |
|----------------|-----------------|-------|---------|--|--|---------|----------|-------|---------|-------|--|-------------------------------------|---------|--|--|
| | Clear. | Fair. | Cloudy. | With 0.1 of an inch or more of rain or melted snow. | 6 a. m. | 2 p. m. | 10 p. m. | Mean. | High'st | Date. | | Lowest | Date. | | |
| | | | | | | | | | | | | | | | |
| January | 4 | 18 | 9 | 18 | 5.3 | 6.9 | 5.4 | 5.9 | 85.0 | 1.76 | Frozen. | | | | |
| February..... | 7 | 11 | 10 | 8 | 5.9 | 5.4 | 5.5 | 5.6 | 79.1 | 0.25 | 11 | | | | |
| March..... | 7 | 17 | 7 | 12 | 6.4 | 5.9 | 4.6 | 5.6 | 76.3 | 1.09 | 29 & 31 | 6.0 | 25 | | |
| April..... | 6 | 11 | 13 | 10 | 6.4 | 6.3 | 5.4 | 6.0 | 74.0 | 3.67 | 8.2 | 1 | 11 | | |
| May..... | 10 | 18 | 3 | 7 | 5.2 | 5.0 | 2.7 | 4.3 | 66.0 | 0.82 | 3, 4, 5 | 4.3 | 30 & 31 | | |
| June..... | 11 | 16 | 3 | 12 | 4.3 | 4.8 | 2.8 | 4.0 | 73.1 | 3.63 | 6.3 | 20 | 11 & 12 | | |
| July..... | 9 | 22 | 0 | 6 | 3.7 | 4.5 | 2.8 | 3.7 | 69.5 | 1.44 | 5.0 | 1 | 25 | | |
| August..... | 13 | 16 | 2 | 8 | 3.7 | 3.1 | 3.4 | 3.4 | 69.8 | 2.27 | 2.5 | 2 & 23 | 15 | | |
| September..... | 3 | 17 | 10 | 12 | 6.6 | 5.8 | 5.7 | 6.0 | 75.4 | 3.69 | 2.8 | 9 | ..... |  |  |
| October..... | 13 | 11 | 7 | 4 | 4.6 | 4.2 | 3.7 | 4.2 | 69.1 | 0.72 | 2.7 | 30 | 10 | | |
| November..... | 8 | 17 | 5 | 11 | 5.2 | 5.0 | 4.4 | 4.9 | 69.3 | 2.07 | 2.8 | 22 | 14 | | |
| December..... | 8 | 19 | 4 | 8 | 4.1 | 5.0 | 3.6 | 4.2 | 77.0 | 1.48 | Frozen. | | | | |
| Sums..... | 99 | 193 | 73 | 116 | 5.1 | 5.2 | 4.4 | 4.8 | 75.3 | 1.82 | | | | | |
| Means..... | | | | | | | | | | | | | | | |

The following table gives the mean annual temperature from 1871 to 1886, both inclusive :

| Year. | Annual Means. | | | | Highest and Lowest Temperature Ob- served at St. Paul, 1871 to 1886. | | | |
|-----------|------------------------|-----------------------------------|-----------------------|---|---|----------------|--------|-----------|
| | Mean tem- perature. | Mean rel- ative hu- midity. | Mean cloudi- ness. | Total rainfall and mlt'd snow. | High'st | Date. | Lowest | Date. |
| 1871..... | 43.7 | 69.4 | 4.5 | 30.63 | | | | |
| 1872..... | 48.5 | 69.8 | 4.8 | 31.77 | | | —16.0 | Jan. 31st |
| 1873..... | 41.8 | 68.6 | 5.1 | 33.74 | 92.5 | July 16th. | —29.0 | Jan. 28th |
| 1874..... | 43.1 | 70.3 | 4.4 | 35.50 | 99.0 | July 6th. | —23.0 | Jan. 14th |
| 1875..... | 39.8 | 69.0 | 5.2 | 30.66 | 95.0 | July 15th. | —32.0 | Feb. 9th |
| 1876..... | 42.3 | 68.8 | 5.5 | 23.67 | 93.0 | July 1st, 8th. | —27.0 | Dec. 9th |
| 1877..... | 49.5 | 65.9 | 5.2 | 28.80 | 93.0 | July 17th. | —26.0 | Jan. 8th |
| 1878..... | 48.3 | 68.5 | 4.9 | 22.78 | 96.0 | July 16th. | —13.0 | Jan. 1st |
| 1879..... | 45.5 | 65.6 | 4.6 | 22.39 | 92.0 | Aug. 29th. | —39.0 | Dec. 25th |
| 1880..... | 44.1 | 68.9 | 4.8 | 22.71 | 98.0 | Aug. 13th. | —27.0 | Dec. 28th |
| 1881..... | 45.2 | 73.4 | 4.8 | 39.16 | 96.2 | Aug. 11th. | —25.0 | Jan. 11th |
| 1882..... | 45.6 | 71.0 | 5.3 | 23.14 | 95.0 | Aug. 14th. | —18.5 | Dec. 7th |
| 1883..... | 40.9 | 68.8 | 5.1 | 26.70 | 100.0 | July 1st. | —31.0 | Jan. 22d |
| 1884..... | 43.7 | 72.7 | 5.4 | 26.11 | 90.0 | July 24th. | —31.5 | Jan. 4th |
| 1885..... | 42.1 | 77.5 | 5.0 | 25.33 | 94.7 | July 30th. | —35.6 | Jan. 2d |
| 1886..... | 42.6 | 75.3 | 4.8 | 21.89 | 94.2 | Aug. 4th. | —33.9 | Jan. 23d |
| Sums.... | 706.7 | 1123.5 | 79.4 | 444.98 | | | | |
| Averages | 44.2 | 70.2 | 5.0 | 27.81 | | | | |

POST OFFICE BUSINESS.

One of the most significant indications of the rapid growth of St. Paul is the yearly increase in the business of the Post Office.

The net yearly income of the office for the past five decades is shown in the following figures :

| | | | | | |
|-------|-------------|-------|--------------|-------|-------------|
| 1846, | \$3.43 | 1856, | \$5,164.67 | 1866, | \$12,009.03 |
| 1876, | \$41,667.92 | 1886, | \$153,009.08 | | |

The gross yearly income of the office in 1875 was \$58,922.63, and in 1886 \$226,972.28.

ST. PAUL CHAMBER OF COMMERCE



11

The following figures represent the total amount of business transacted during the year ending December 31st, 1885 and 1886 respectively:

| | 1885. | 1886. |
|---|---------------|---------------|
| General business, total postal funds..... | \$ 529,413 51 | \$ 622,612 36 |
| Money order business, total financial transactions..... | 4,300,642 23 | 4,704,382 86 |
| Net income..... | 134,501 13 | 153,009 08 |
| Registry division, number of letters and packages..... | 347,855 | 364,066 |

LETTER CARRIERS' DIVISION.

| | 1885. | 1886. |
|---|------------|------------|
| Number of carriers..... | 32 | 45 |
| Number of auxiliaries..... | 7 | ... |
| Registered letters delivered..... | 41,112 | 37,059 |
| Mail letters delivered..... | 4,578,742 | 5,970,406 |
| Mail postal cards delivered..... | 713,282 | 928,646 |
| Local letters delivered..... | 705,732 | 1,130,119 |
| Local postal cards delivered..... | 407,534 | 715,701 |
| Newspapers, etc., delivered..... | 2,999,520 | 4,012,840 |
| Letters returned to the office..... | 6,333 | 5,672 |
| Letters collected..... | 3,751,376 | 4,506,360 |
| Postal cards collected..... | 1,316,093 | 1,640,247 |
| Newspapers, etc., collected..... | 423,102 | 548,875 |
| Totals..... | 14,642,826 | 19,495,935 |
| Special delivery letters delivered..... | *2,721 | 7,953 |

*Three months.

In the box and general delivery departments 2,225,165 pieces of mail were handled in 1885, and 1,417,682 in 1886. In the dead letter division, 91,958 pieces were handled in 1885, and 99,638 in 1886. The total pieces of mail originating at this office in 1885 numbered 17,538,847; in 1886, 20,380,320. There were 11,060,124 single newspapers mailed to subscribers and news-dealers in 1885, and 13,401,192 in 1886. There were 45,432 sacks of paper mail distributed in 1885, and 62,823 in 1886. Of the mail handled in transit, there were 1,325,870 pieces handled in 1885; 1,238,250 in 1886. In 1885, 158,288 mail pouches and tie sacks were received and dispatched; in 1886, 186,489. The grand total of pieces handled is: In 1885, 34,846,651; in 1886, 42,995,791.

INTERNAL REVENUE COLLECTIONS.

| | 1883. | 1884. | 1885. | 1886. |
|-------------------------|--------------|--------------|--------------|--------------|
| Miscellaneous..... | \$ 36,868.67 | \$ 3,554.66 | \$ 2,001.93 | \$ 1,514.67 |
| Beer stamps..... | 221,362.53 | 260,113.99 | 269,909.16 | 299,792.40 |
| Cigars and tobacco..... | 80,421.31 | 87,673.43 | 93,806.52 | 100,614.18 |
| Special taxes..... | 104,178.49 | 140,020.71 | 143,278.70 | 154,478.08 |
| Total..... | \$442,831.00 | \$491,462.19 | \$505,054.39 | \$556,399.33 |

CUSTOM HOUSE BUSINESS.

| | 1880. | 1881. | 1882. | 1883. | 1884. | 1885. | 1886. |
|-------------------------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Value of dutiable goods | \$34,770.00 | \$62,783.00 | \$115,851.00 | \$144,822.00 | \$128,097.00 | \$186,574.00 | \$313,495.00 |
| Total duties collected | 13,680.97 | 26,983.56 | 41,264.73 | 60,212.62 | 60,462.97 | 78,368.42 | 139,031.86 |

BANKING INSTITUTIONS.

One of the most important factors in promoting the growth of St. Paul is found in the number and high character of its Banking establishments.

They give to her business operations a degree of solidity and high credit equaled by few and surpassed by no other cities in the West. The result of the business of the Banks during the year 1886, shows not only a sound financial condition of these several institutions, but it gives to the City that standing and prestige which only ample stores of wealth can command. As will be seen, the aggregate capital of the Banks amounts to \$6,450,000. The deposits during the year amounted to \$16,436,647; the loans to \$19,131,238; exchange \$148,768,864; undivided profits \$2,144,210. The West Side Bank was only opened in August, with a capital of \$50,000, since increased to \$100,000; and the Seven Corners Bank was not organized until September 15th.

| Bank. | Capital. | Surplus and undivid'd Profits. | Deposits. | Loans. | Exchange. | Circulation. |
|--------------------------|-------------|--------------------------------|--------------|--------------|---------------|--------------|
| First National..... | \$1,000,000 | \$725,871 | \$4,300,000 | \$4,042,000 | \$35,700,000 | \$45,000 |
| Second National..... | 200,000 | 300,000 | 1,100,000 | 1,025,000 | 14,500,000 | 180,000 |
| Third National..... | 500,000 | 45,404 | 450,000 | 1,100,000 | 4,500,000 | 45,000 |
| National German American | 2,000,000 | 174,807 | 2,900,642 | 3,811,342 | 19,376,670 | 45,000 |
| St. Paul National..... | 500,000 | 67,000 | 400,000 | 850,000 | 4,232,684 | 45,000 |
| Merchants National..... | 1,000,000 | 610,000 | 3,204,000 | 3,862,000 | 40,933,000 | 90,000 |
| People's | 100,000 | *3,000 | 159,712 | 223,538 | 1,000,000 | ..... |
| Savings..... | 50,000 | 15,000 | 425,000 | 416,000 | 800,000 | ..... |
| Bank of Minnesota..... | 600,000 | 123,000 | 2,400,000 | 2,400,000 | 12,000,000 | ..... |
| Germania..... | 300,000 | 47,589 | 716,941 | 927,686 | 8,600,000 | ..... |
| Capital..... | 100,000 | *30,000 | 280,000 | 305,000 | 7,000,000 | ..... |
| West Side..... | 50,000 | 1,139 | 61,896 | 98,672 | 66,510 | ..... |
| Seven Corners..... | 50,000 | 1,400 | 38,456 | 70,000 | 60,000 | ..... |
| Totals..... | \$6,450,000 | \$2,144,210 | \$16,436,647 | \$19,131,238 | \$148,768,864 | \$450,000 |

*Surplus only.

For convenience of reference, the following statement of the total number of Banks in Minnesota is given, with their resources and liabilities, followed by a summarized exhibit of the Banks of the State compared with those of the two leading cities, St. Paul and Minneapolis :

NUMBER OF BANKS IN THE STATE.

| | 1884. | 1886. | Inc. |
|----------------------|-------|-------|------|
| National..... | 48 | 51 | 3 |
| State..... | 32 | 47 | 15 |
| Savings..... | 6 | 7 | 1 |
| Trust companies..... | 2 | 2 | 0 |
| Private..... | 128 | 130 | 2 |
| Totals..... | 216 | 237 | 21 |

CAPITAL STOCK.

| Banks. | 1884. | 1886. | Increase. |
|------------------|--------------|--------------|-------------|
| 51—National..... | \$10,240,060 | \$12,265,000 | \$2,024,940 |
| 47—State..... | 3,475,000 | 4,613,600 | 1,138,600 |
| 2—Savings..... | 150,000 | 150,000 | ..... |
| 2—Trust..... | 389,354 | 650,400 | 261,046 |
| 71—Private..... | 2,039,685 | 2,470,100 | 430,415 |
| 173—Totals..... | \$16,294,099 | \$20,149,100 | \$3,855,001 |

SURPLUS FUNDS.

| Banks. | 1884. | 1886. | Increase. |
|------------------|-------------|-------------|-----------|
| 51—National..... | \$1,592,954 | \$2,185,779 | \$592,825 |
| 20—State..... | 423,182 | 554,094 | 130,912 |
| 4—Savings..... | 36,810 | 67,363 | 30,553 |
| 1—Trust..... | 10,000 | 25,000 | 15,000 |
| 27—Private..... | 247,198 | 363,600 | 116,402 |
| 103—Totals..... | \$2,310,144 | \$3,195,836 | \$885,692 |

INDIVIDUAL DEPOSITS.

| Banks. | 1884. | 1886. | Increase. |
|------------------|--------------|--------------|-------------|
| 51—National..... | \$16,950,659 | \$20,593,114 | \$3,642,455 |
| 40—State..... | 7,698,715 | 10,416,219 | 2,717,504 |
| 7—Savings..... | 2,634,743 | 3,655,289 | 1,020,546 |
| 2—Trust..... | 55,832 | 328,251 | 272,419 |
| 100—Totals..... | \$27,339,949 | \$34,992,873 | \$7,652,924 |

LOANS AND DISCOUNTS.

| Banks. | 1884. | 1886. | Increase. |
|------------------|--------------|--------------|-------------|
| 51—National..... | \$25,334,442 | \$30,614,682 | \$5,280,240 |
| 40—State..... | 9,814,784 | 12,375,051 | 2,560,267 |
| 7—Savings..... | 2,423,550 | 2,790,228 | 366,678 |
| 2—Trust..... | 268,770 | 626,309 | 357,539 |
| 101—Totals..... | \$37,841,546 | \$46,406,270 | \$8,564,724 |

SUMMARY OF ABOVE.

| | Totals. | Increase. |
|--------------------------------------|--------------|-------------|
| Number of Banks..... | 237 | 21 |
| Capital stock (173 banks)..... | \$20,149,100 | \$3,855,001 |
| Surplus fund (103 banks)..... | 3,195,836 | 885,692 |
| Individual deposits (100 banks)..... | 34,992,873 | 7,652,924 |
| Loans and discounts (101 banks)..... | 46,406,270 | 8,564,724 |

The following table shows the capital and surplus of all Banks in Minnesota for 1886 :

| | Capital. | Surplus. | Total. |
|------------------------------------|--------------|-------------|--------------|
| Minnesota..... | \$17,155,600 | \$3,053,308 | \$20,208,908 |
| St. Paul..... | 6,450,000 | 1,407,600 | 7,887,600 |
| Minneapolis..... | 5,330,000 | 577,500 | 5,907,500 |
| Total St. Paul and Minneapolis.... | 11,810,000 | 2,085,100 | 13,795,100 |
| St. Paul exceeds Minneapolis..... | 1,150,000 | 830,100 | 1,980,100 |

St. Paul lacks only \$1,097,800 of having one-half the banking capital of the whole State. St. Paul lacks only \$2,216,854 of having one-half of the entire banking capital and surplus of the State. St. Paul exceeds one-third of the entire banking capital of the State by \$761,467. St. Paul exceeds one-fourth of the entire banking capital of the State by \$1,151,298.

The following figures, furnished by Public Examiner Knox, are the official figures for the Banks of St. Paul for the August call, not including the Seven Corners and West Side banks, and the Peabody private bank :

| | |
|--------------------------|--------------|
| Total resources..... | \$25,040,642 |
| Capital and surplus..... | 7,780,900 |
| Deposits..... | 12,609,670 |
| Loans..... | 17,904,164 |

THE SAINT PAUL TRUST COMPANY.

This important financial institution is entitled to rank among the best of its kind throughout the country. It has a capital of \$250,000, and the guaranty deposit with the State Auditor amounts to \$100,000. It acts as executor of wills, administrator of estates, guardian of the estates of minors, trustee of persons or corporations requiring the execution of any trust, assignee, receiver, custodian, agent, etc., etc. Its financial statement for 1886 is appended as a part of the business showing for the year :

ASSETS.

| | |
|-----------------------------|--------------|
| Mortgage Loans..... | \$185,338 46 |
| Bills Receivable..... | 37,643 45 |
| Bonds..... | 3,077 20 |
| Safe Deposit Vaults..... | 14,610 95 |
| Furniture and Fixtures..... | 3,457 27 |
| Total Assets..... | \$244,127 33 |

LIABILITIES.

| | |
|-----------------------------|--------------|
| Capital Stock, paid in..... | \$150,800 00 |
| Debentures Issued..... | 8,000 00 |
| Annuity Account..... | 4,769 61 |
| Trust Accounts..... | 14,926 50 |
| Personal Accounts..... | 43,147 45 |
| Profit and Loss..... | 22,483 77 |
| Total Liabilities..... | \$244,127 33 |

BUILDING AND LOAN ASSOCIATIONS.

No notice seems to have been taken in the recent Annual Reports of this Chamber of one very important agency in the building up of this great metropolis, the St. Paul Building Associations, of which there are 37 within

our corporate limits, with about 8000 members, while others are being organized. Their monthly receipts average about \$100,000, or, \$1,200,000 per annum. The objects of these admirable organizations, and the great results they have accomplished, justify a permanent record here of their beneficent achievements, and I avail myself of the contribution of John W. McClung, Esq., to the Pioneer Press of January 1st, and give place to it without further explanation :

The first Building Association west of the Ohio, was organized in St. Paul, in August, 1869—the St. Paul Mutual No. 1. In April, 1870, the St. Paul Workmen's Association was organized, followed in 1874 by the Homestead, the West St. Paul, two in Minneapolis, and one in Faribault. Following these, the St. Paul leaven worked its way to Stillwater, Hudson and Eau Claire in Wis., Hastings, Red Wing, Winona, Mankato, Fergus Falls, Sauk Center, St. Cloud, and other sections of this State, where Associations were organized and are now in operation. There are thirty-seven Building Associations in St. Paul, with about 8,000 members, and two or three more are organizing. They meet monthly to pay in the installments on their stock and on their loans. Their monthly receipts average about \$100,000, or \$1,200,000 per annum. The only uses allowed for these receipts are to make loans to their members to build houses, or for any other purpose, and to redeem the stock when members wish to withdraw, or when the stock matures and ripens to par value, which takes place from eight and a half to ten years in St. Paul, and nine to twelve in Philadelphia. Any person who can pay one dollar per month can be a stockholder to the amount of two hundred dollars, and entitled to a loan to the extent of his stock, which loan must be secured by an assignment of his stock and real estate security, worth together double the loan. When the member borrows he pays double every month what he paid as a non-borrower, but he shares in the profits of the stock the same as the non-borrower, and his payments cease at the same time; that is, when the stock matures to par value, and his par stock equaling the face of his loan (bonus and all) offsets his loan and pays it. This participation in the profits pays his bonus, and makes his loan a fair and reasonable one, and relieves it of the usurious feature which some persons suppose attaches to their loans. A borrower does not ordinarily pay out any more money on his Building Association loan than he does on an 8 per cent loan, only he pays a part of the principal in advance every month, and whatever he would get for these advances if he saved them (4 per cent in a savings bank) must be added to his interest, and will amount to 1 or 1½ per cent more. The convenience of paying in small sums monthly and reducing the member's indebtedness every month is considered a full compensation for the 1 or 1½ per cent increase of interest.

AS BUILDERS OF HOMES FOR THE PEOPLE.

A careful estimate by the Secretaries of the Associations in St. Paul places the number of houses built by loans in their Associations at 831 per annum. The figures have been taken from the books of a large number of the Associations, and the opinion is that the number is not overstated, and the cash receipts justify the above estimates. The amount paid monthly by the borrowers who build these houses seldom exceeds the rents which are paid for similar houses. Often it is less—according to the means of the borrower independent of the loan. It becomes thus not so much a question of interest (more or less) but whether a man will throw away what he pays for ten years for rent, while his landlord owns the house, or whether he will pay it into his own pocket at the same time, and own the house himself.

The public benefit to cities and States resulting from the building features of these Associations is seen and felt in the permanency of the population owning their own homes, who are attached to the soil and interested in low taxes and good government, and opposed to all socialistic and disorganizing schemes. Philadelphia has 600 Building Associations, while New York has scarcely any.

The census of 1870 showed that Philadelphia's population of 674,000 was housed in 112,366 dwellings—one house to every six persons—while New York's population of nearly a million was housed in 61,044 dwellings—one house to about fifteen persons.

AS SAVINGS BANKS.

There are two classes of members in Building Associations, those who borrow and those who do not borrow, but use the Association as a savings bank. Each receives precisely the same profit, only one uses his profits to pay his loan and the bonus charged for the advance, while the other gets no advance, but pays his fees eight and a half to ten years and gets his profits in cash at the end of the time. These Associations pay from 10 to 20 per cent as savings banks, according to the time the money is invested, and are the safest savings banks in the world—all the money entrusted to them being loaned on real estate security, and not dependent on the personal responsibility of the borrowers. Both in this country and Europe there are fewer failures among Building and Loan Associations than among any other financial institutions. When there were only four Associations in St. Paul there were 875 members. Of these there were 144 mechanics, 130 laborers, 110 clerks and salesmen, 41 minors, 90 women, and 85 merchants. The balance was from all ranks, but mostly poor men. The savings of these 875 people amounted then to over \$10,000 a month, made up of sums ranging from \$1 per month to \$40, but mostly \$5 and \$10 per month and under. A gentleman with an experience of seventeen years as Secretary and manager of the St. Paul Mutual Building Association No. 1, says he has seen men not supposed to be worth a dollar pay in \$10, \$15 and \$20 per month, and own stock worth \$2,000 and \$3,000 at the cash withdrawal value, and never borrow. It has given him an insight into the condition of the working classes and mechanics which is most encouraging. They are wonderfully prosperous and solid men, and have a large stake in having good order and a rest from socialistic and communistic agitations. These Associations are emphatically the people's savings banks, and where they flourish no other savings banks can.

After our first four Associations had been running, two of them over six years and two others two years, only two foreclosures had taken place. In the St. Paul No. 1, after a seventeen years' run, with nearly eight hundred loans, I think not exceeding twenty-five foreclosures have been made, including the seven years' hard times succeeding the crisis of 1873. The debt decreases every month, making the security better, while the system is so flexible that it does not become necessary to crowd the borrower. When he is six months in arrears he is liable to foreclosure, but, if he pays along as he is able, he is charged a reasonable fine, his profits going on as if he was paying regularly, and he is indulged until he can do better. When Philadelphia's population was 674,000 she had 600 Building Associations. Pennsylvania had 1000. St. Paul's population of 150,000 entitles her to over 100 Associations. Every town and city in the State can support one or more of these Associations, and the Legislature can do nothing better than to exempt these Associations from taxation, as far as possible. This has been done by Pennsylvania. This would encourage the workingmen in the work of building up our cities, and creating millions of wealth out of the floating waifs of five and ten dollar bills that would be wasted and squandered and never appear on the tax lists except for these Associations.

SAINT PAUL'S JOBBING TRADE.

The Jobbing Trade of this city continues to increase with the extension of our railway lines into the immense stretch of territory tributary to the Capital of the State, and with the spread of population over the prairie regions intervening between the Mississippi River and the Rocky Mountains. As there is scarcely any limit to the growth of this territory, in population and wealth, so there is scarcely any assignable limit to the increase of a trade so sagaciously cultivated by the enterprising and liberal

merchants of St. Paul. The statistics of this business are obtained with great difficulty, owing to the indisposition of some and the neglect of others to respond to the requests of this office for the necessary data. Such as they are they must be regarded as only fair approximations to the actual results of the year's work.

WHOLESALE BUSINESS, 1886.

| Branches. | Number of Estab-lishments | Number of Em-ployes. | Amount of Sales in 1886. | Increase over 1885. |
|---|---------------------------|----------------------|--------------------------|---------------------|
| Agricultural implements..... | 7 | 125 | \$ 2,000,000 | ..... |
| Barrels..... | 7 | 100 | 120,000 | \$ 20,000 |
| Blank books, paper and church goods | 8 | 100 | 1,125,000 | ..... |
| Beer..... | 23 | 200 | 1,300,000 | 100,000 |
| Boots and shoes..... | 6 | 125 | 3,900,000 | 300,000 |
| Brewers' supplies..... | 3 | 27 | 245,000 | 2,000 |
| Bricks and tiles..... | 17 | 300 | 320,000 | 15,000 |
| Cigars and tobacco..... | 17 | 136 | 1,400,000 | 50,000 |
| Clothing..... | 3 | 75 | 1,000,000 | ..... |
| Coffees, teas and spices..... | 3 | 95 | 650,000 | ..... |
| Confectionery and bakers' products..... | 4 | 170 | 700,000 | 3,000 |
| Crockery and glassware..... | 3 | 56 | 550,000 | 50,000 |
| Drugs, paints and oils..... | 12 | 230 | 4,400,000 | 400,000 |
| Dry goods..... | 6 | 530 | 9,600,000 | 600,000 |
| Fuel and pigiron..... | 36 | 500 | 5,097,000 | 297,000 |
| Furniture..... | 7 | 75 | 600,000 | 80,000 |
| Fruits..... | 5 | 40 | 900,000 | 300,000 |
| Grain, flour, feed and commission..... | 69 | 207 | 9,750,000 | 425,000 |
| Groceries..... | 6 | 410 | 11,000,000 | ..... |
| Guns and sporting goods..... | 2 | 18 | 220,000 | ..... |
| Hardware, stoves and heavy iron..... | 10 | 285 | 3,600,000 | 100,000 |
| Hats, caps and furs..... | 9 | 240 | 1,500,000 | 88,000 |
| Hides and furs..... | 8 | 70 | 900,000 | 150,000 |
| Jewelry..... | 7 | 28 | 200,000 | ..... |
| Junk..... | 3 | 40 | 113,000 | 23,000 |
| Leather, saddlery and finding..... | 5 | 110 | 1,100,000 | ..... |
| Lime and cement..... | 8 | 30 | 200,000 | ..... |
| Live stock..... | 6 | 45 | 3,000,000 | ..... |
| Lumber..... | 39 | 1,290 | 4,500,000 | 250,000 |
| Machinery and mill supplies..... | 12 | 265 | 1,500,000 | ..... |
| Millinery and lace goods..... | 12 | 95 | 500,000 | 45,000 |
| Musical instruments..... | 6 | 70 | 420,000 | 20,000 |
| Notions, toys and hosiery..... | 9 | 129 | 850,000 | ..... |
| Printing materials..... | 2 | 22 | 150,000 | ..... |
| Provisions and dressed meats..... | 12 | 350 | 4,000,000 | ..... |
| Sash, doors and blinds..... | 9 | 210 | 1,000,000 | ..... |
| Trunks and valises..... | 2 | 25 | 200,000 | ..... |
| Wagons and carriages..... | 8 | 66 | 600,000 | 300,000 |
| Wines and liquors..... | 12 | 70 | 2,000,000 | ..... |
| Miscellaneous..... | 45 | 413 | 2,978,000 | 124,000 |
| Totals..... | 468 | 7,372 | 84,188,000 | 3,742,000 |

Miscellaneous includes bar supplies, billiard tables, brooms, brushes, carpets, fireworks, fish, ice, milk, mineral waters, photographic materials, rubber goods, seeds, shot, stone-ware, soap, tailors' trimmings and vinegar.

MANUFACTURES, 1886.

| Manufactures. | Number of estab- lishments | Number of employees | Total Value of Product, 1886. | Increase over 1885. |
|--|----------------------------------|---------------------------|-------------------------------------|---------------------------|
| Agricultural implements..... | 2 | 400 | \$550,000 | ..... |
| Barrels..... | 7 | 120 | 130,000 | \$5,000 |
| Blacksmiths and wheelwrights..... | 39 | 109 | 115,000 | 3,000 |
| Bookbinding..... | 9 | 140 | 130,000 | 5,000 |
| Boots and shoes..... | 48 | 900 | 1,600,000 | 100,000 |
| Brass works..... | 5 | 74 | 112,000 | 62,000 |
| Brewers and maltsters..... | 12 | 200 | 1,000,000 | 30,000 |
| Bricks and tiles..... | 16 | 370 | 225,000 | ..... |
| Brooms and brushes..... | 5 | 50 | 64,000 | 1,000 |
| Cigars..... | 50 | 950 | 1,200.00 | 60,000 |
| Clothing..... | 85 | 1,600 | 1,900,000 | 10,000 |
| Confectionery..... | 5 | 75 | 150,000 | ..... |
| Contractors and builders..... | 156 | 5,148 | 7,953,000 | 723,000 |
| Crackers and bakery products..... | 40 | 300 | 950,000 | ..... |
| Drugs, chemicals and oil..... | 5 | 118 | 600,000 | 25,000 |
| Engraving..... | 12 | 48 | 72,000 | 1,000 |
| Flour and grist milling..... | 5 | 65 | 1,025,000 | ..... |
| Furniture and upholstery..... | 12 | 145 | 200,000 | 25,000 |
| Furs..... | 8 | 220 | 460,000 | 10,000 |
| Harness and saddlery..... | 15 | 146 | 300,000 | 35,000 |
| Iron, architectural..... | 3 | 160 | 275,000 | ..... |
| Jewelry and watch repairing..... | 15 | 42 | 65,000 | ..... |
| Machinery, foundries and boilers..... | 21 | 400 | 1,100,000 | ..... |
| Marble and stone cutting..... | 30 | 1,300 | 1,000,000 | ..... |
| Millinery, lace and fancy goods..... | 18 | 140 | 115,000 | 3,000 |
| Painting and glazing..... | 55 | 275 | 295,000 | ..... |
| Photography..... | 24 | 72 | 78,000 | 3,000 |
| Pictures and frames..... | 3 | 23 | 36,000 | ..... |
| Printing and publishing..... | 47 | 1,324 | 1,900,000 | ..... |
| Railroad repairs and car making..... | 6 | 1,583 | 1,129,000 | 129,000 |
| Slaughtering and meat packing..... | 60 | 260 | 1,800,000 | ..... |
| Sash, doors, boxes and planing mills.... | 11 | 310 | 512,000 | ..... |
| Tin and hardware, stoves and plumbing | 30 | 320 | 570,000 | ..... |
| Trunks and valises..... | 2 | 79 | 122,000 | 22,000 |
| Wagons and carriages..... | 20 | 300 | 900,000 | ..... |
| Miscellaneous..... | 76 | 1,192 | 2,410,000 | 700,000 |
| Totals..... | 957 | 18,958 | \$31,043,000 | \$1,952,000 |

Miscellaneous includes awnings and tents, artificial limbs, boats, carpet weavers, carriage trimmers, cutlery grinding, dyeing, dry plates, fence works, fire proof building material, fire works, hair goods, knit goods, lighting companies, lumber, mineral waters, musical instruments, mattresses, nickel plating, optician, plastering, sewer and drain pipes, show cases, soap, sporting goods, stamps, shot, taxidermist, terra cotta lumber, type foundry, vinegar, and wire works.

MANUFACTURES.

The movement in the direction of increased manufactures during the past year assumed extraordinary proportions. The special efforts made by the Chamber of Commerce, the organization of the great Live Stock industries in West St. Paul, and other causes, combined greatly to enlarge the sphere of this class of activities.

The necessity of growth in this direction was universally felt, and the general discussion of the subject served to direct the attention of manufacturers in all parts of the country to the advantages offered here for their special pursuits. The results of these co-operating causes were quite sur-

prising. The amount of capital thus added to the productive industries of St. Paul is more than \$4,000,000, and may be summarized as follows :

| | |
|---|-------------|
| The Stock Yards and allied interests..... | \$3,250,000 |
| The Bohn Manufacturing Company..... | 250,000 |
| The Edison Electric Light and Power Company..... | 200,000 |
| The Holland & Thompson Manufacturing Company..... | 75,000 |
| The Waterous Engine Works Company..... | 100,000 |
| The Warner & Hough Machine Works..... | 50,000 |
| The Undertakers' Manufacturing Company..... | 100,000 |
| Estimated increased capitalization of existing works..... | 100,000 |

Among the latter are the Saint Paul Knitting Works, and the Saint Paul Rolling Mills.

Such results as these are certainly encouraging, and should stimulate increased exertions in behalf of further manufacturing developments. The competition among rival cities, especially in the West, was never so great as at the present moment, and this is not the time for St. Paul to relax efforts that have proved to be so fruitful as those of the past year. The increase in the value of manufactured articles during the year 1886 over 1885 is shown by the annexed table to be nearly \$2,000,000, without taking into account the output of the new establishments, many of which had not gone into operation at the close of the year. The present year ought to show a much greater aggregate than ever, and, in the near future, it is safe to predict that in the value of their products, the manufactories of St. Paul will outrank those of her jobbing trade.

BUILDING IMPROVEMENTS.

There is, perhaps, no criterion by which the actual growth of a city may be determined more accurately than its building and improvements. Judged by this standard, St. Paul, during the past year, has made grander progress than in any previous twelve-month of her history. During the year the building of the city—embracing the improvements in South St. Paul, which are clearly a part of the city's enterprise—has amounted to nearly \$10,000,000. This vast sum has been confined to no one branch of development. It has embraced public buildings, business blocks, residences, churches, manufacturing establishments—each is superbly represented in the grand total. It will be seen that fifty per cent has been added to the total amount, as shown by the books at the building inspector's office. This has been necessary, from the fact that the permits do not in any sense represent the total amount of improvements, except in rare instances. There are at least two main reasons for this : A desire to evade a partial cost of the permit, and a lack of real understanding as to what proposed improvements are to cost. There are very many additional expenditures, both in the way of alterations and improvement, which the most honorably inclined man cannot foresee, and he is, of necessity, obliged to increase the cost of his dwelling or business block above the sum given out in the permit, which may have seemed ample at the time. In one case a permit for

about \$25,000 was taken out, the total expenditure footing up over \$100,000. In another case, the repairs and alterations on a business block were thought to cost at the outset only \$18,000, but \$35,000 were eaten up ere the work was completed. A permit was taken out to put up the foundation for a residence, the permit being a little less than \$12,000, while the total cost of the residence will be about \$50,000. A large business block would cost, by the permit, \$240,000—the actual cost being \$290,000; and another large block, which cost \$80,000, is down on the inspector's books for \$60,000. A church, to cost by the permit \$40,000, will cost \$80,000 when completed. A business block for which the permit was taken out at \$19,000, cost \$25,000. A fine residence, by the permit is to cost \$50,000; by the architect's figures it comes up to \$75,000. A tenement block permit was \$20,000—the actual cost was \$27,000. Instance after instance might be given in proof, if proof were needed. It is estimated that fully \$500,000 worth of building has been done in the city during the year on permits taken out in 1885; but no account of this is taken in making up the total. As an offset to this, the amount of building to be done partially in 1887, for which permits were taken out this year is figured in. On the City Hall and Court House, \$400,000 was expended last year and \$200,000 was expended in 1885, leaving \$250,000 to be expended this year. This building will not be included in the review of 1887. During the year, (including December), there have been 3,459 permits taken out, but this does not show the entire number of new buildings erected, for many in the outlying districts have put up small buildings without taking out permits.

The annexed table, from the Building Inspector's Report, shows the number of buildings for which permits were taken out, and the cost of the whole given by wards:

| WARDS. | PERMITS. | COST. |
|---|-----------|----------------|
| First Ward..... | 202..... | \$266,870.00 |
| Second Ward..... | 146..... | 1,797,574.00 |
| Third Ward..... | 255..... | 552,700.00 |
| Fourth Ward..... | 1369..... | 1,498,288.00 |
| Fifth Ward..... | 927..... | 900,393.00 |
| Sixth Ward..... | 437..... | 580,759.00 |
| Seventh Ward..... | 234..... | 459,448.70 |
| Total, estimated by the owners..... | 3570..... | \$6,056,032.70 |
| Add 40 percent to above amount as the estimated actual cost.. | | \$2,422,413.08 |
| Add for plumbing work not previously included in original estimate..... | | 200,000.00 |
| Add for improvements to remove buildings, alterations and repairs, for which permits were not required to be taken out... | | 250,000.00 |
| Add for foundations to buildings on which buildings are to be erected the coming season..... | | 150,000.00 |
| Add for improvements at Stock Yards on line of Minnesota & Northwestern Railway just outside city limits..... | | 550,000.00 |
| Add for structures just outside city limits in various parts of the city, for which permits could not issue..... | | 125,000.00 |
| Grand total..... | | \$9,753,445.78 |

REAL ESTATE TRANSACTIONS.

It goes without saying that the movement in real estate in St. Paul has assumed proportions during the year 1886 never before known in the history of the city. The number of deeds filed for record in the past five years, with the consideration, is given below. The statements by months for the year 1886 follows. The transactions for 1887 bid fair greatly to exceed the past year, and indicate an uninterrupted season of prosperity :

THE COMPARISONS.

| YEAR. | NO. OF TRANSFERS. | CONSIDERATION. |
|-----------|-------------------|----------------|
| 1882..... | 4,447 | \$9,354,841 |
| 1883..... | 4,847 | 12,981,331 |
| 1884..... | 5,128 | 8,359,521 |
| 1885..... | 6,928 | 14,318,867 |
| 1886..... | 11,443 | 27,826,633 |

TRANSFER BY MONTHS.

| | 1885. | 1886. |
|----------------|-------------------|--------------|
| January..... | \$379,084..... | \$1,450,707 |
| February..... | 1,379,500..... | 2,224,539 |
| March..... | 832,091..... | 1,965,201 |
| April..... | 1,253,569..... | 2,764,813 |
| May..... | 1,222,145..... | 2,462,469 |
| June..... | 1,344,809..... | 1,410,188 |
| July..... | 1,066,797..... | 1,412,546 |
| August..... | 1,111,823..... | 2,179,422 |
| September..... | 1,323,047..... | 1,906,261 |
| October..... | 1,437,294..... | 2,388,103 |
| November..... | 1,682,558..... | 2,514,898 |
| December..... | 1,285,118..... | 6,147,486 |
| Totals..... | \$14,318,867..... | \$27,826,633 |

COMPARISON.

An investigation made by the *Pioneer Press* during the past year into the comparative value of real estate in St. Paul and six other cities named below, yields facts of so much interest that they are appended hereto. They were obtained by correspondence with real estate firms in the cities of Cleveland, Cincinnati, Louisville, St. Louis, Omaha, Kansas City, Denver, Milwaukee, and Chicago. Several letters have been received from each of these cities. The questions asked for information about unimproved property solely, and were six in number : first, as to the price of the most valuable business property ; second. the cheapest business property within one mile of the center of business ; third, the most valuable residence property ; fourth, good medium residence property ; fifth, cheapest residence property within two miles of the business center ; sixth, the highest and lowest prices of acres within four miles of the business center. These answers have been compiled and condensed into the following tables, the figures for St. Paul and Minneapolis being added for comparison :

QUESTION NO. 1.

Price per front foot of most valuable business property:

| | | | |
|-----------------|---------|------------------|---------|
| Chicago..... | \$6,000 | Kansas City..... | \$1,750 |
| Cincinnati..... | 3,000 | Milwaukee..... | 1,750 |
| Louisville..... | 1,200 | Omaha..... | 1,000 |
| Cleveland..... | 3,000 | Minneapolis..... | 1,200 |
| St. Louis..... | 2,500 | St. Paul..... | 900 |
| Denver..... | 750 | | |

QUESTION NO. 2.

Price per front foot of cheapest business property within one mile of center of business:

| | | | |
|-----------------|-------|------------------|------|
| Chicago..... | \$300 | Kansas City..... | \$60 |
| Cincinnati..... | 150 | Milwaukee..... | 75 |
| Louisville..... | 40 | Omaha..... | 75 |
| Cleveland..... | \$100 | Minneapolis..... | 100 |
| St. Louis..... | 200 | St. Paul..... | 75 |
| Denver..... | 100 | | |

QUESTION NO. 3.

Price per front foot for most desirable residence property:

| | | | |
|-----------------|-------------------|------------------|-------|
| Chicago..... | \$800 | Kansas City..... | \$200 |
| Cincinnati..... | \$400 to 600 | Milwaukee..... | 200 |
| Louisville..... | 200 feet deep 150 | Omaha..... | 100 |
| Cleveland..... | 800 | Minneapolis..... | 200 |
| St. Louis..... | 200 | St. Paul..... | 175 |
| Denver..... | 150 | | |

QUESTION NO. 4.

Price per lot (with size) good medium residence property:

| | | | |
|--------------------------------|--------------------|-----------------------|--------------------|
| Chicago, 25x150..... | \$2,500 to \$5,300 | Denver, 25x125..... | \$1,000 to \$1,500 |
| Cincinnati, 25x100 or 150..... | 1,500 to 3,000 | Kansas City, 50x100.. | 3,000 |
| Louisville, 25x100..... | 2,000 | Milwaukee, 60x120.... | 3,000 to 6,000 |
| Cleveland, 50x150..... | 5,000 | Omaha, 50x140..... | 2,000 |
| St. Louis, 25x100..... | 1,875 | Minneapolis, 50x100.. | 3,000 to 4,000 |
| | | St. Paul, 50x150..... | 2,000 |

QUESTION NO. 5.

Price per lot of cheapest residence property, giving size of lot, within two miles of business center:

| | | | |
|--------------------------------|----------------|-----------------------|-------------|
| Chicago, 25x100..... | \$1,800 | Denver, 25x125..... | \$300 |
| Cincinnati, 25x100 to 150..... | 500 to \$1,000 | Kansas City, 25x130.. | 575 |
| Louisville, 25x100..... | 625 | Milwaukee, 30x127.... | 500 |
| Cleveland, 40x130..... | 800 | Omaha, 50x140..... | 450 |
| St. Louis, 25x130..... | 1,000 | Minneapolis, 50x100.. | 300 |
| | | St. Paul, 50x130..... | 300 |

QUESTION NO. 6.

Highest and lowest prices of acres within four miles of business center:

| | | | |
|-----------------|---------------------|------------------|-------------------|
| Chicago..... | \$5,000 to \$20,000 | Kansas City..... | \$500 to \$10,000 |
| Cincinnati..... | 150 to 4,000 | Milwaukee..... | 400 to 5,000 |
| Louisville..... | 400 to 2,000 | Omaha..... | 175 to 3,500 |
| Cleveland..... | 2,000 to 30,000 | Minneapolis..... | 5,000 to 30,000 |
| St. Louis..... | 600 to 5,000 | St. Paul..... | 125 to 4,000 |
| Denver..... | 25 to 200 | | |

THE PUBLIC SCHOOLS.

There have been but comparatively few school houses erected in the city during the year, though there have been a number of improvements and additions. The Hendricks school building is the most important enterprise. It is located in the Sixth Ward, and is a large and commodious structure, costing in the neighborhood of \$30,000. The total amount expended for building, alterations, additions and improvements, is about \$100,000. The total valuation of all school buildings is \$933,618. Below is found a tabulated statement showing the buildings erected and those improved, and also the same in private schools. This is taken from the inspector's books, and the figures will not, of course, show the total amount of expenditures.

PUBLIC SCHOOLS:

| | |
|--|----------|
| Hendricks, Central avenue, Sixth Ward..... | \$25,000 |
| Addition to Rice..... | 11,000 |
| Addition to Jackson..... | 8,500 |
| Improvements in Franklin..... | 14,000 |
| Repairs to Neill..... | 300 |

PRIVATE SCHOOLS:

| | |
|---|----------|
| St. Louis School, (Catholic), Tenth street..... | \$10,000 |
| Additions to St. Paul Seminary, (Catholic), cor. Cleveland and Division | 40,000 |
| German Lutheran School, Margaret street..... | 2,500 |
| Additions to the Academy of Visitation, Robert, corner of Aurora..... | 800 |

Total.....\$112,100

CHURCHES.

Below will be found a tabulated statement of the church work of the city during the past year:

| | |
|---|----------|
| St. Stanislaus, Western avenue..... | \$11,000 |
| Dayton Avenue Presbyterian..... | 36,300 |
| First Baptist Chapel, Wacouta street..... | 18,000 |
| Pilgrim Baptist, (colored), Cedar street..... | 10,000 |
| Central Park M. E., Minnesota street..... | 40,000 |
| Danish Evangelical Lutheran, Burgess street..... | 1,200 |
| J. A. Sabin, Rice street, near Geranium..... | 1,000 |
| Addition to St. Joseph's, Carroll street..... | 2,500 |
| R. P. Lewis trustee, Edmund street..... | 3,400 |
| Grace M. E., Burr street..... | 5,000 |
| D. L. Kingsbury, Prior avenue, Merriam Park..... | 3,200 |
| Henry Boettcher, Fourth street, near Bates avenue..... | 6,000 |
| St. Johns, addition, Ashland avenue..... | 1,000 |
| E. A. Ford, chapel, Chicago avenue, near Starkey street..... | 800 |
| House of Hope Mission, chapel, Hampstead street..... | 1,500 |
| Swen Olsen, Whitehall, near Edgerton street..... | 600 |
| German Lutheran, repairs, Goff street..... | 300 |
| St. John's, (Catholic), Frances, near Forest street..... | 2,500 |
| Charles S. Schuman, Presbyterian, Robie street..... | 6,000 |
| German Lutheran church and parsonage, Hall avenue, near Robie st... | 18,000 |

Total.....\$168,300

PUBLIC IMPROVEMENTS.

The permit for the Court House and City Hall was taken out in 1886. There has been a large amount of work done on the building during the year. The total cost will be \$850,000, according to the chairman of the building committee. The work on the building in 1885 amounted to \$200,000; that of the year just past to \$400,000. The following summary of the public improvements for the year has been arranged. It does not include the Robert street Bridge:

| | |
|---|-----------|
| Court House and City Hall..... | \$850,000 |
| Addition to vault of old court house..... | 1,250 |

FIRE ENGINE HOUSES:

| | |
|--|---------|
| York, near Edgerton street..... | \$5,000 |
| Hennepin avenue, near Milton street..... | 5,000 |
| Conway, near Maple street..... | 7,000 |
| Repairs to No. 5, Selby avenue..... | 5,000 |

POLICE SUB-STATIONS:

| | |
|---|---------|
| Westwood, between Erone and University..... | \$2,974 |
| Corner of Ducas and Delos streets..... | 2,974 |
| Corner of Hope and Margaret..... | 2,974 |
| Rondo, corner Western..... | 2,808 |

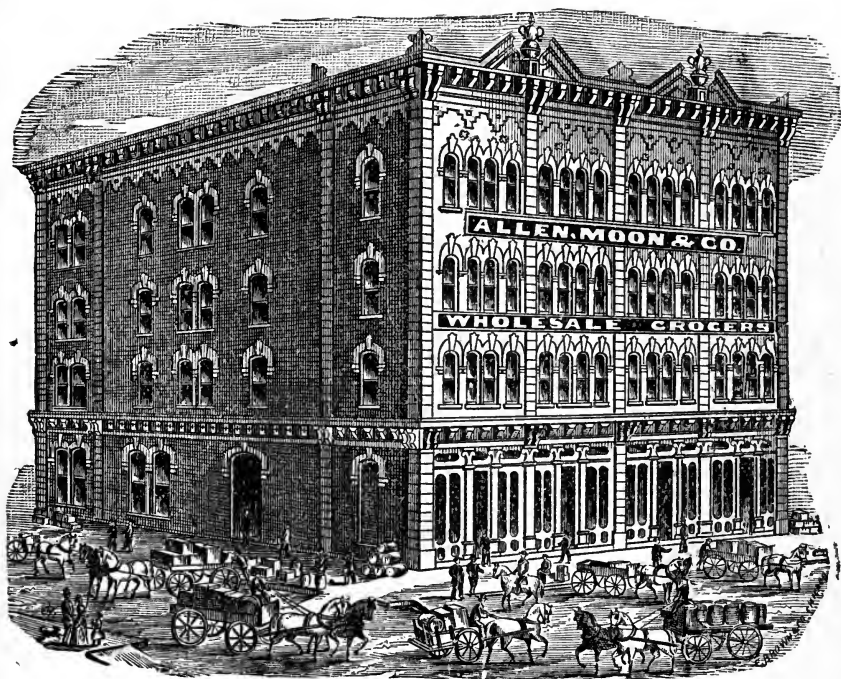
| | |
|------------|-----------|
| Total..... | \$884,980 |
|------------|-----------|

RAILROADS.

The improvements made by the various railroads centering in St. Paul have been more general than particular, and have for the most part been of a minor nature. The following table will show the complete list, as taken from the building inspector's books:

| | |
|--|----------|
| St. Paul & Northern Pacific shops and store-houses, Mississippi, corner of York street..... | \$30,790 |
| Passenger station, Lexington avenue..... | 2,500 |
| Passenger station, Kendrick street..... | 2,500 |
| Passenger station, Snelling avenue..... | 2,500 |
| Passenger station, Rice street..... | 2,500 |
| Passenger station, Como avenue..... | 2,500 |
| Lumber shed, Snelling avenue..... | 4,200 |
| Section-house, Bayless street..... | 1,300 |
| Northern Pacific passenger and baggage-room, Broadway, between Prince and Fourth streets..... | 2,400 |
| Chicago, Burlington & Northern, coal-chute, train-house and engine-house, river and Dayton's Bluff..... | 11,100 |
| Chicago, Milwaukee & St. Paul, passenger station, between Snelling avenue and Saratoga street..... | 1,565 |
| Minnesota & Northwestern, creamery and ice-house, Fillmore avenue, between Starkey and Custer streets..... | 6,000 |
| Store-house, Ducas street..... | 800 |
| Minnesota Transfer Company, engine-house, Union street..... | 3,000 |
| Bank and office, University avenue..... | 14,000 |
| Wisconsin Central, water-tank and pump-house, Fifth, near Bradley st. | 1,600 |

| | |
|------------|----------|
| Total..... | \$89,255 |
|------------|----------|



ALLEN MOON & CO., WHOLESALE GROCERY HOUSE.

THE CITY FINANCES.

The following statement from the official Report of the City Comptroller gives a succinct view of the financial operations of the City of St. Paul from November 1st, 1885 to November 1st, 1886, and will be convenient for reference by its citizens, as well as interesting to non-residents desiring to learn the condition of her finances :

RECEIPTS.

| | |
|--|----------------|
| General taxes..... | \$668,416.83 |
| Special water tax..... | 19,416.71 |
| Licenses..... | 89,496.00 |
| St. Paul water works receipts..... | 200,352.67 |
| St. Paul water works special receipts..... | 84,542.70 |
| City bonds sold..... | 425,000.00 |
| Ramsey county court house bonds..... | 100,000.00 |
| Premiums received on bonds..... | 22,627.50 |
| Accrued interest received on bonds..... | 2,187.50 |
| Local assessment collections..... | 916,115.93 |
| Certificates of indebtedness, special..... | 62,800.00 |
| Committee on ways and means, temporary loans, special..... | 29,000.00 |
| Certificates of sale and redemption money..... | 51,062.34 |
| Miscellaneous receipts..... | 62,272.67 |
| Total receipts..... | \$2,733,290.85 |
| Add balance in hands of George Reis, City Treasurer, Nov. 1, 1885..... | 313,623.74 |
| Grand total receipts..... | \$3,046,914.59 |

EXPENDITURES.

| | |
|---|------------|
| City orders paid from previous year..... | \$ 316.83 |
| Local assessment contracts paid..... | 904,753.35 |
| Court house and city hall..... | 182,270.77 |
| Robert street bridge..... | 255,797.73 |
| Sufferers from cyclone in St. Cloud and Sauk Rapids..... | 5,000.00 |
| Sufferers from hail storm in Marshall county..... | 10,000.00 |
| City bonds redeemed..... | 54,040.00 |
| School district bonds redeemed through annexation of territory..... | 15,800.00 |
| Fire department expenses..... | 202,993.77 |
| Water works expenditures..... | 321,106.29 |
| Workhouse expenditures..... | 23,995.71 |
| Library expenditures..... | 10,030.47 |
| Certificate of sale, amount paid holders..... | 51,239.24 |
| Interest coupons upon the bonded debt paid..... | 177,124.94 |
| St. Paul Gas Light Co., thirteen months' gas bills..... | 34,991.54 |
| Robert Seeger, gasoline contract, twelve months..... | 27,218.92 |
| Real estate purchased..... | 28,950.00 |
| Public parks purchased and expenses..... | 23,794.91 |
| Committee on ways and means, temporary loans paid..... | 22,000.00 |
| Police department expenditures..... | 121,960.39 |
| Building inspector's expenditures..... | 7,570.83 |
| Engineering department expenditures..... | 59,804.57 |
| Miscellaneous contracts..... | 69,682.49 |
| Salaries..... | 33,665.21 |
| Printing, advertising and stationery..... | 42,049.99 |
| General expenses..... | 30,081.80 |
| Sewerage expenses..... | 9,631.64 |
| City hall and prison expenses..... | 887.06 |
| Almshouse and hospital expenses, total cost for city portion..... | 13,781.60 |
| Board of health expenses..... | 12,729.55 |

| | |
|--|----------------|
| Special certificates of indebtedness paid..... | 6,665.00 |
| Judgments paid..... | 13,150.09 |
| Water furnished for public purposes, one year..... | 21,204.69 |
| Water expenditures..... | 76,604.03 |
| Miscellaneous expenditures..... | 34,127.67 |
| Total expenditures..... | \$2,905,021.43 |
| Balance of cash in hands of George Reis, City Treasurer, Nov. 1, 1886..... | 141,893.16 |

SHOWING THE OBJECTS FOR WHICH THE OUTSTANDING CITY BONDS WERE ISSUED, NOVEMBER 1, 1886, VIZ:

| | |
|--|-----------------|
| Bonus to Lake Superior & Mississippi Railroad Company (issued in year 1868)..... | \$ 200,000.00 |
| Bonus to St. Paul & Chicago Railroad Company (issued in year 1870)..... | 100,000.00 |
| Bonus to Milwaukee & St. Paul Railroad Company (issued in year 1869)..... | 50,000.00 |
| Bonus bonds, interest, (issued in year 1872)..... | 50,000.00 |
| Bonus to Northern Pacific Railroad Company and St. Paul & Sioux City Railroad Company (issued in year 1879. "Reserve Fund")..... | 120,000.00 |
| Como Park, 259 95-100 acres, (issued in year 1873)..... | 100,000.00 |
| Sewerage purposes (issued in years 1873, 1874, 1878, 1879, 1880, 1881, 1883, 1884, 1885 and 1886)..... | 709,100.00 |
| Redemption of bonds (issued in years 1860 to 1873)..... | 200,500.00 |
| Revenue purposes (issued in years 1860 to 1865)..... | 58,100.00 |
| Soldiers' bounties (issued in year 1864)..... | 50.00 |
| Fire cisterns (issued in year 1860)..... | 115.00 |
| Owatonna road (issued in year 1860)..... | 100.00 |
| St. Paul bridge (Wabasha street, issued in years 1864, 1866, 1867, 1870, 1873, 1881)..... | 91,010.71 |
| Alms house and hospital buildings (issued in years 1872 and 1873)..... | 15,000.00 |
| Fire department real estate (issued in years 1869, 1870 and 1886)..... | 73,125.00 |
| New Market house (issued in year 1879)..... | 40,000.00 |
| West St. Paul bonded debt (assumed and settled by the City of St. Paul—issued in year 1878)..... | 13,500.00 |
| Local improvements (issued in year 1873)..... | 100,000.00 |
| Fourth street bridge approaches (issued in year 1881)..... | 5,000.00 |
| Lafayette avenue bridge approaches (issued in year 1882)..... | 26,000.00 |
| St. Paul water works, \$350,000 purchase and \$1,150,000 extensions (issued in years 1882, 1883, 1884 and 1885)..... | 1,500,000.00 |
| City workhouse construction (issued in years 1881, 1883 and 1884)..... | 80,000.00 |
| Public parks (issued in years 1883 and 1886)..... | 50,000.00 |
| Fort street grading and macadamizing (issued in year 1884)..... | 10,000.00 |
| Dakota avenue grading and macadamizing (issued in year 1884)..... | 5,000.00 |
| Sixth ward levee, damages for land taken (issued in year 1883)..... | 20,000.00 |
| Westminster street bridge approaches (issued in year 1883)..... | 5,000.00 |
| Phalen creek roadway (issued in year 1883)..... | 65,000.00 |
| Court House and City Hall building (issued in years 1885 and 1886)..... | 150,000.00 |
| Robert street bridge over Mississippi river (issued in years 1885 and 1886)..... | 300,000.00 |
| Abutments at railroad crossings (issued in year 1886)..... | 50,000.00 |
| Total bonds..... | \$ 4,186,600.71 |

SHOWING THE ANNUAL INTEREST ON OUTSTANDING CITY BONDS, NOV. 1, 1886, VIZ:

| Amounts. | Per Cent. | Annual Int. |
|--------------------|-----------|--------------|
| \$ 431,000.00..... | 4 | \$ 17,240.00 |
| 425,000.00..... | 4½ | 19,125.00 |
| 2,051,600.00..... | 5 | 102,580.00 |
| 468,000.00..... | 6 | 28,080.00 |
| 547,875.71..... | 7 | 38,351.30 |
| 263,125.00..... | 8 | 21,050.00 |

\$ 4,186,600.71—On which there is a total annual interest of.....\$226,426.30

There is \$71,500 of the annual interest paid out of the receipts of the Water Works. The balance of \$154,926.30 is paid by direct tax upon the real and personal estate.

COMMERCE OF THE MISSISSIPPI RIVER.

This great water-way is a factor of prime importance in the commerce of the Northwest. Millions of tons of heavy freight and of commodities which cannot be moved by any method of land transportation are annually floated from the upper river and its tributaries to points below. As a regulator of freights on the land, the river more than justifies all the appropriations made by the Government for its improvement, aside from its intrinsic value as a highway of commerce for the great States that border its banks on either side. The value of the Mississippi is so forcibly illustrated in the late Report of the State Commission, and the argument for its constant improvement is so well stated, that the following extract is inserted here as appropriate to the objects of this Report :

“The relative proportion of freights moved by the railways and on the water-ways in and out of St. Paul, when measured in tons, and taking into account such staple commodities as logs, lumber, wood, railway ties, ice, brick, stone, etc., if properly admeasured, would show that all commodities, which at present prices will not bear a high rate of transportation, are carried by water, and in car-load weights very many times exceed the tonnage movement of all the railways which touch the State. Not less than one thousand five hundred millions of logs and lumber find their way from the forests to the markets of the country and to consumers over the water-ways of Minnesota, and a corresponding amount of other necessities traverse the same routes. More than a hundred boats ply the navigable waters of the State, carrying and towing millions of tons of freight at prices with which no other method of transportation can compete. The construction of several artificial water-ways, to connect the several national systems, seems to be one of the necessities of the situation. The most important of these artificial water-ways is the Sault Ste. Marie canal connecting Lake Superior with the lower chain of lakes. This canal is now the great outlet for the products of the Northwest, 4,530,000 tons of freight having passed through it during the season of 1886. The report recommends that this canal be deepened to 24 feet, and that further improvements be made in the harbors of Duluth and Grand Marais, and in the Portage canal, and refers to the Hennepin canal as a necessity. The opening of the proposed canal connecting the Minnesota and Red rivers by way of Big Stone and Traverse lakes, if ever accomplished, would be an event of more importance than the opening of the Northern Pacific railroad, in the opinion of the commissioners. The report reviews the river improvements during the last year, recalling the fact that the last Congress appropriated for improving St. Croix river, \$7,500; for Chippewa river, \$18,750; for Red River, \$47,000, and for the reservoirs, \$37,000. With regard to the reservoirs, the commissioners state that the four now

completed have a total capacity of 70,000,000 cubic feet, the annual supply being a little more than half their capacity. During the low water period of 1885, the reservoirs at Lake Winnibigoshish, Leech Lake, and Pokegama Falls, furnished for seventy days nearly three-eighths of the water flowing past St. Paul. During the past unusually dry season, the same reservoirs were drawn upon heavily from June 1st to November 16th, or for 168 days, and there is no doubt that from the middle of August to the close of navigation in November, the additional water liberated from these reservoirs maintained the stage of water at St. Paul about one foot higher than it would have been without their aid. The value of the work already done on the upper Mississippi cannot be overestimated. The obstacles to navigation between St. Louis and St. Paul have been so far overcome that in seasons of the most extreme low water, like the past one, the largest class of steamers ever used on the river can run with regularity and safety. The Minneapolis Board of Trade appends a memorial to Congress and asks for more adequate appropriations for the improvement of the various water-ways, and especially in behalf of the reservoirs and the Mississippi between Minneapolis and St. Paul. The citizens of West St. Paul ask for an additional appropriation of \$25,000 to complete the harbor already begun."

CONNECTION BETWEEN THE WATERS OF THE MISSISSIPPI RIVER AND LAKE SUPERIOR—SAVING IN FREIGHT.

At a meeting of the Board of Directors of the St. Paul Chamber of Commerce held on the 31st of January, 1887, the following report, submitted by the Committee on Mississippi River, was adopted :

The Committee on the Mississippi River, to whom was referred the resolutions of J. W. McClung, asking a report upon the feasibility and expediency of connecting the waters of Lake Superior with the Mississippi river, and the best measures to secure the improvement, if found expedient and possible, would respectfully report the accompanying communication from W. H. C. Folsom, formerly a State Senator from Taylor's Falls, inclosing a report to the Legislature upon the subject by L. K. Stannard and R. R. Davis, and another by George R. Stemtz, showing the feasibility and expediency of the proposed improvement, and giving facts and figures in detail, which should be printed and preserved for reference, but which are too voluminous to allow more than a brief summary in this report. From these documents we make the following extracts :

In March, 1885, \$3,000 was appropriated by the Legislature of Minnesota for surveys. Three routes were surveyed by L. K. Stannard and R. R. Davis—one from Taylor's Falls, by way of St. Croix river to Namekagon river, up this river and across the summit to White river, and by that to the lake. Another at St. Croix to upper St. Croix Lake, thence across the summit to the Bois Brule river, thence to the lake. A third route at St. Croix to Kettle river up to Moose lake, Hanging Horns lake to Left Hand river.

Their conclusions were, that the small appropriation did not give them either time or means to make any accurate survey of any route; that the Namekagon route, 250 miles long, was objectionable on this account; that the Brule river route was the shortest and best, being 165 miles long, but had the disadvantage of having no natural harbor at the lake; and the Kettle river route, about 200 miles long, was the most expensive of the three, but had a good harbor, already improved, at Superior Bay.

Mr. George R. Stemtz, in an article published on the subject, says: "Can Lake St. Croix, at Stillwater, be connected with Lake Superior by canal and slack-water navigation? Yes. This question has been definitely settled by the recent examination of the United States engineers, under the direction of Maj. Charles J. Allen, of the source of the St. Croix river, with reference to the construction of reservoirs. By constructing a dam one mile above the mouth of Moose creek, on the St. Croix, high enough to raise the water twenty-five feet, cutting a canal seventy-five feet wide, twelve feet deep, one and a half miles long,

across the summit, and building a dam in town 16, range 10, across the Brule river high enough to raise the water to the same height as the dam on the St. Croix, and you construct a lake thirty miles long, affording uninterrupted navigation across the summit for that distance, and utilize the waters of the St. Croix and its branches, and the Brule's and the amount of water (15,300 cubic feet per minute from the St. Croix, and 5,805 per minute from the Brule) is sufficient to pass vessels through locks 75 feet wide, 300 feet long, 12½ feet lift, at the rate of three per hour, or, 72 in 24 hours, at the driest season of the year. This settles the question of practicability."

He estimates twenty-eight locks and dams between Stillwater and the summit, and thirty locks and ten dams on the Brule river, and the whole cost as less than eight millions of dollars, with an average cost per mile of \$40,000. Continuing, he says: "Will it pay to spend this money? It costs now from 5 to 7 cents per bushel to ship wheat by rail from Prescott to Lake Superior, and it has to pass through one elevator, if not two, on the route. By water it can be carried for 2 cents per bushel. The same for a bushel of corn. It now costs \$2.50 per ton for all that class of goods received in exchange for grain, oil, coal, salt, iron, and machinery. With this improvement, this class of goods can be carried for 60 cents per ton. The surplus crops of Northwest Wisconsin, including the valleys of the Chippewa and St. Croix rivers, capable of producing 15,000,000 bushels of wheat annually, if they do not do it at present, and Southern Minnesota, 30,000,000 bushels of wheat, and other products equal in tonnage to one-third of that amount, or, 60,000,000 bushels surplus. This improvement, on exports alone, would be a saving to the States of \$3,000,000 a year. In three years, with favorable seasons, more than the full cost of the improvement would be saved to the region benefited. The estimates that a dam at the mouth of the St. Croix, holding a three-foot head on this lake, as a reserve from the spring freshets, would store up 34,073,600 cubic yards of water to be used in the dry season of August and September to improve the navigation of the Mississippi river, and continuing this plan to the source would afford a continuous reservoir 150 miles long."

Mr. Folsom writes that the Hon. H. M. Rice gave him much valuable information of a connection from Upper St. Croix lake to St. Louis river harbor as being a practical route, passing over the high lands dividing the Superior and St. Croix waters, through a country susceptible of easy improvements, with no insurmountable hills to overcome—a distance of about thirty-five miles. "This route would be well supplied with reservoirs, and, should engineering skill prove it available, would be the most direct route. Small streams between Upper St. Croix lake and the State line, flow from the north into the St. Croix river, whose sources almost interlock with streams flowing north into St. Louis Bay. I would recommend a minute examination of all the country between Kettle and St. Croix rivers, for herein lies the shortest route to Lake Superior, but the shortest route to make eastern connections would be by the Nemakagon and White rivers to Ashland.

"The enlargement of St. Mary's canal and Hay river, to give twenty feet of water, and the improvements by the Dominion government of the Welland and Lachine canals are all being prepared for the passage of vessels of 3000 tons burden between Duluth and European ports. The Dominion government has under consideration also, a ship canal across the isthmus severing Nova Scotia from the continent thus shortening the commercial trade between St. Lawrence and the Atlantic cities. With all these enterprises and our St. Croix canal opened, we will be from 300 to 500 miles nearer the markets of the world than at present, the route will be traversed in two-thirds of the time, our grain going out from the head of the continent, protected by our northern climate, without breaking bulk, will reach markets quickly and be fresh and pure. Figures can hardly compute the vast amount of transportation that will ultimately pass over this Northern route. Ocean steamers will be constructed especially for this inland-American trade, as was the case with the Suez canal. Hundreds of vessels are employed transporting crude iron ore from Lake Superior eastward for smelting and manufacturing. If a portion of this trade could be centered into our Upper Mississippi valley, when the ores of Superior meet midway the

coal from the south of us, who can estimate the result? These northern mineral regions are becoming hives of industry which are being fed from our prairies."

Mr. Folsom concludes his communication with the following valuable data: "Our high latitude, which is sneered at by the sophistical reasoner as against the northern route, is sheer fallacy. Boats cannot go to Chicago until the Straits of Mackinac are open, at which time they can go to Lake Superior. The straits and St. Mary's canal close from the 1st to the 15th of December. The average opening of the Straits of Mackinac, in a series of years, is from April 1 to April 15; of Hudson river, at New York, from March 6 to April 7; of the bay, at Superior, from March 20 to May 5; of the bay, at Ashland and Bayfield, from March 20 to April 22."

The conclusions to which your committee have arrived, are, that the vast interests and possibilities of the immense empire lying between Lake Superior and the Pacific Ocean—yet in its infancy, and destined to be the granary of the world—demands of this generation a far-seeing and liberal policy in opening up and utilizing all our water-ways; and that no expense is too great which will bring Lake Superior and the seaboard to our doors, and enable us to avail ourselves of the best advantages in all the markets of the world. We recommend that the communication and documents be forwarded to the Legislatures of Minnesota and Wisconsin, with the request of this Chamber that an appropriation be made sufficient to insure further examinations and more accurate and scientific surveys, and that a memorial be addressed to Congress asking that this project be placed upon the role of improvements to be recognized as of national importance, and deriving a fair proportion of the national bounties for improving the water-ways of the country.

J. W. McCLUNG,
Chairman Mississippi River Committee.

ST. PAUL'S RAILWAY SYSTEM.

The development of the railway system of the Northwest will always be a subject of deep interest to the people of St. Paul. The growth of the city has kept even pace with the growth of her railroads, and the two facts bear to each other, perhaps, somewhat the relation of cause and effect. Her sagacious merchants and business men perceived at an early day the supreme importance of promoting by all practicable means the construction of these highways of commerce, and, possessing the courage of their convictions, they did not hesitate at a critical period of her history to employ all the resources of private capital and public credit to secure for St. Paul the prestige of becoming the railway center of the New Northwest, a distinction which she to-day undoubtedly enjoys, and the fruits of which she is now reaping in liberal measure.

As will be seen by the subjoined summary, the new mileage of the past year exceeds that of any of the six preceeding years, while it is also evident that 1887 will witness even a greater growth than either of its predecessors.

RAILWAY CONSTRUCTION SUMMARY.

| | |
|--|--------------|
| Total number of miles of track laid..... | 2,486 |
| Total expenditure for construction..... | \$45,147,767 |
| Total for other improvements..... | 6,113,566 |
| Total for all moneys expended..... | 50,411,333 |

COMPARATIVE TABLE.

| | |
|---------------------------|-------|
| New mileage for 1886..... | 2,486 |
| New mileage for 1885..... | 660 |
| New mileage for 1884..... | 1,033 |
| New mileage for 1883..... | 1,319 |
| New mileage for 1882..... | 2,400 |
| New mileage for 1881..... | 2,081 |
| New mileage for 1880..... | 1,478 |

DETAILED STATEMENT.

| Roads. | New mileage. | Cost. | Other expendi- tures. |
|----------------------------------|-----------------|--------------|-----------------------------|
| Manitoba..... | 379 | \$7,580,000 | \$860,219 |
| Burlington & Northern..... | 250 | 7,000,000 | *1,500,000 |
| F., Elk & Mo. Val..... | 295.9 | 5,000,000 | †..... |
| Minnesota & Northwestern..... | 272 | 4,896,000 | 242,000 |
| Minneapolis & Pacific..... | 218 | 4,360,000 | †..... |
| Northern Pacific..... | 185.4 | 2,306,767 | 294,800 |
| Chi. Milwaukee & St. Paul..... | 162 | 3,240,000 | 1,512,537 |
| Chicago & Northwestern..... | 150 | 3,000,000 | †..... |
| Chicago, Wis. & M..... | 116 | 2,320,000 | †..... |
| Dakota & Great S..... | 86 | 1,290,000 | †..... |
| Duluth & Manitoba..... | 80 | 1,200,000 | †..... |
| Minn. & Sault Ste. Marie..... | 73 | 1,095,000 | †..... |
| B., C. R. & N..... | 42.5 | 510,000 | †..... |
| Duluth & Iron Range..... | 29.5 | 590,000 | †..... |
| Omaha..... | 24 | 400,000 | 450,000 |
| St. Paul & Northern Pacific..... | 10 | 150,000 | 700,000 |
| Chicago & G. W..... | 9 | 180,000 | †..... |
| Minnesota Transfer..... | 3 | 30,000 | 20,000 |
| St. Paul & Duluth..... | ... | ..... | 506,000 |
| Minneapolis & St. Louis..... | ... | ..... | 27,500 |
| Total..... | 2,486.3 | \$45,147,767 | \$6,113,566 |

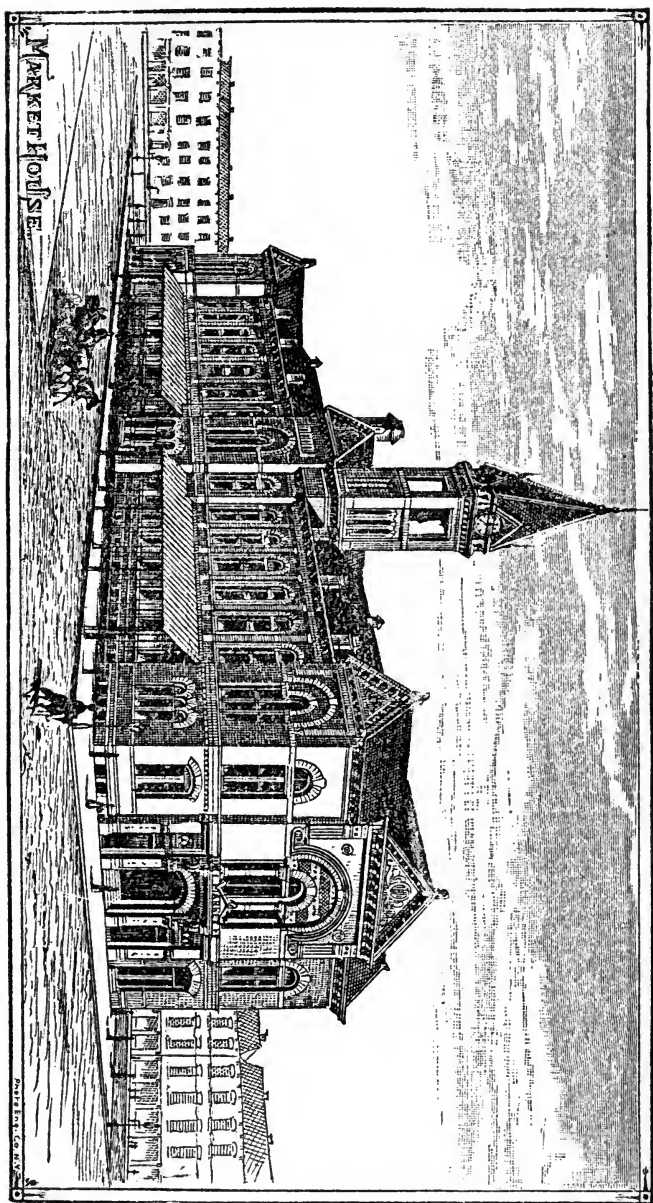
* Estimated. † None reported. ‡ Included in Chicago, Milwaukee & St. Paul.

TOTAL MILEAGE OF THE COUNTRY.

According to the last issue of the Railroad Gazette, the total new mileage of the country for the past fifteen years, was :

| Year. | Miles. | Year. | Miles. |
|-----------|--------|-----------|--------|
| 1886..... | 6,719 | 1878..... | 2,263 |
| 1885..... | 2,699 | 1877..... | 1,994 |
| 1884..... | 2,652 | 1876..... | 2,278 |
| 1883..... | 5,997 | 1875..... | 1,333 |
| 1882..... | 9,799 | 1874..... | 1,844 |
| 1881..... | 7,898 | 1873..... | 3,630 |
| 1880..... | 5,997 | 1872..... | 7,160 |
| 1879..... | 3,643 | | |

This statement covers main tracks only, second or other additional tracks and sidings not being counted.



CITY MARKET.

SHIPMENTS BY CAR LOADS FOR 1886.

| 1886. Shipm'ts for Week Ending | Wheat. | Flour. | Lumber. | Merchandise. | Agricultural Implements. | Castings and Machinery. | Construction and R. R. Material. | Total. |
|-----------------------------------|--------|--------|---------|--------------|-----------------------------|----------------------------|--|--------|
| January 2..... | 25 | 29 | 73 | 495 | 0 | 2 | 31 | 799 |
| January 9..... | 24 | 26 | 62 | 523 | 0 | 3 | 26 | 827 |
| January 16..... | 14 | 33 | 80 | 550 | 3 | 1 | 32 | 890 |
| January 23..... | 11 | 22 | 58 | 442 | 1 | 3 | 23 | 695 |
| January 30..... | 20 | 32 | 78 | 513 | 5 | 3 | 46 | 916 |
| February 6..... | 11 | 34 | 87 | 513 | 9 | 3 | 29 | 886 |
| February 13..... | 7 | 26 | 85 | 481 | 6 | 6 | 56 | 891 |
| February 20..... | 21 | 25 | 82 | 552 | 10 | 3 | 51 | 992 |
| February 27..... | 30 | 26 | 90 | 553 | 11 | 5 | 130 | 1,098 |
| March 6..... | 32 | 26 | 111 | 550 | 12 | 10 | 109 | 1,055 |
| March 13..... | 21 | 28 | 112 | 540 | 18 | 12 | 75 | 999 |
| March 20..... | 24 | 73 | 160 | 601 | 20 | 7 | 140 | 1,252 |
| March 27..... | 25 | 43 | 166 | 654 | 20 | 11 | 61 | 1,232 |
| April 3..... | 5 | 40 | 214 | 729 | 28 | 16 | 141 | 1,414 |
| April 10..... | 9 | 34 | 240 | 631 | 13 | 8 | 83 | 1,228 |
| April 17..... | 9 | 47 | 284 | 687 | 14 | 6 | 115 | 1,354 |
| April 24..... | 46 | 114 | 298 | 686 | 20 | 10 | 262 | 1,769 |
| May 1..... | 33 | 131 | 213 | 671 | 21 | 12 | 190 | 1,381 |
| May 8..... | 52 | 102 | 228 | 671 | 15 | 7 | 299 | 1,654 |
| May 15..... | 31 | 123 | 199 | 610 | 15 | 5 | 330 | 1,563 |
| May 22..... | 33 | 103 | 248 | 654 | 22 | 6 | 154 | 1,453 |
| May 29..... | 130 | 227 | 348 | 773 | 18 | 5 | 191 | 1,952 |
| June 5..... | 91 | 72 | 194 | 447 | 7 | 2 | 88 | 1,199 |
| June 12..... | 116 | 61 | 281 | 665 | 17 | 8 | 105 | 1,500 |
| June 19..... | 98 | 63 | 260 | 750 | 18 | 7 | 109 | 1,553 |
| June 26..... | 98 | 98 | 235 | 721 | 21 | 3 | 259 | 1,531 |
| July 3..... | 105 | 174 | 278 | 702 | 26 | 7 | 232 | 1,791 |
| July 10..... | 64 | 97 | 183 | 596 | 26 | 6 | 233 | 1,424 |
| July 17..... | 103 | 102 | 177 | 674 | 42 | 26 | 255 | 1,611 |
| July 24..... | 87 | 121 | 194 | 699 | 32 | 15 | 174 | 1,662 |
| July 31..... | 20 | 90 | 199 | 702 | 4 | 30 | 109 | 1,322 |
| August 7..... | 15 | 143 | 190 | 718 | 13 | 19 | 218 | 1,621 |
| August 14..... | 67 | 74 | 151 | 618 | 13 | 20 | 163 | 1,560 |
| August 21..... | 129 | 71 | 220 | 679 | 18 | 24 | 209 | 1,673 |
| August 28..... | 251 | 80 | 214 | 840 | 21 | 17 | 233 | 1,913 |
| September 4..... | 88 | 70 | 180 | 700 | 4 | 15 | 158 | 1,548 |
| September 11..... | 262 | 98 | 141 | 783 | 11 | 18 | 114 | 1,856 |
| September 18..... | 133 | 95 | 143 | 772 | 5 | 8 | 127 | 1,598 |
| September 25..... | 45 | 108 | 162 | 811 | 7 | 2 | 136 | 1,648 |
| October 2..... | 58 | 98 | 117 | 797 | 4 | 3 | 48 | 1,470 |
| October 9..... | 11 | 67 | 168 | 800 | 6 | 28 | 177 | 1,665 |
| October 16..... | 2 | 26 | 87 | 655 | 5 | 8 | 46 | 1,200 |
| October 23..... | 1 | 22 | 123 | 677 | 4 | 3 | 114 | 1,246 |
| October 30..... | 10 | 23 | 165 | 784 | 1 | 11 | 207 | 1,623 |
| November 6..... | 7 | 34 | 192 | 745 | 0 | 5 | 218 | 1,559 |
| November 13..... | 7 | 35 | 254 | 735 | 2 | 28 | 241 | 1,740 |
| November 20..... | 6 | 22 | 137 | 634 | 0 | 9 | 115 | 1,356 |
| November 27..... | 3 | 23 | 145 | 663 | 1 | 5 | 170 | 1,619 |
| December 4..... | 7 | 35 | 132 | 724 | 1 | 16 | 189 | 1,506 |
| December 11..... | 22 | 32 | 117 | 731 | 1 | 24 | 127 | 1,571 |
| December 18..... | 12 | 33 | 157 | 693 | 2 | 12 | 90 | 1,588 |
| December 25..... | 101 | 29 | 96 | 601 | 0 | 10 | 64 | 1,474 |
| December 31..... | 51 | 39 | 111 | 634 | 1 | 14 | 41 | 1,380 |
| Totals..... | 2,683 | 3,483 | 8,929 | 34,829 | 592 | 537 | 7,323 | 74,267 |

Included in total are 15,891 cars of miscellaneous goods.

[This page was accidentally omitted from its true place following receipts on page 35.]



CHAMBER OF COMMERCE.

RECEIPTS AND SHIPMENTS BY CAR LOADS AT ST. PAUL DURING 1886.—Concluded.

| | 0 | 13 | 28 | 36 | 6 | 22 | 8 | 189 | 60 | 134 | 376 | 116 | 369 | 604 | 14 | 27 | 41 | 250 | 2,682 |
|---------------------|-----|-----|-------|-------|-----|-----|-----|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|--------|---------|
| August 7th..... | 2 | 19 | 32 | 69 | 1 | 33 | 4 | 143 | 56 | 46 | 283 | 70 | 273 | 429 | 11 | 23 | 18 | 154 | 2,106 |
| August 14th..... | 2 | 34 | 25 | 63 | 8 | 36 | 4 | 119 | 61 | 21 | 239 | 111 | 440 | 566 | 11 | 14 | 10 | 66 | 2,101 |
| August 21st..... | 11 | 40 | 24 | 64 | 15 | 25 | 7 | 207 | 45 | 57 | 317 | 117 | 386 | 662 | 21 | 14 | 67 | 28 | 2,451 |
| August 28th..... | 13 | 5 | 33 | 43 | 2 | 24 | 11 | 218 | 67 | 37 | 248 | 95 | 417 | 564 | 16 | 28 | 36 | 79 | 2,367 |
| September 4th..... | 7 | 10 | 35 | 37 | 9 | 36 | 9 | 189 | 74 | 76 | 260 | 141 | 200 | 647 | 22 | 31 | 30 | 196 | 2,423 |
| September 11th..... | 12 | 12 | 28 | 58 | 9 | 21 | 16 | 150 | 84 | 42 | 371 | 184 | 236 | 728 | 62 | 26 | 17 | 196 | 2,213 |
| September 18th..... | 8 | 18 | 49 | 90 | 11 | 19 | 9 | 153 | 63 | 66 | 248 | 131 | 293 | 633 | 36 | 21 | 15 | 196 | 2,992 |
| September 25th..... | 17 | 18 | 37 | 66 | 3 | 6 | 5 | 213 | 107 | 67 | 337 | 219 | 363 | 565 | 40 | 22 | 17 | 121 | 2,617 |
| October 2nd..... | 17 | 14 | 32 | 57 | 13 | 24 | 19 | 319 | 98 | 44 | 446 | 181 | 403 | 678 | 36 | 17 | 29 | 219 | 2,946 |
| October 9th..... | 13 | 4 | 73 | 45 | 1 | 17 | 8 | 252 | 73 | 11 | 356 | 208 | 296 | 578 | 17 | 10 | 9 | 203 | 2,484 |
| October 16th..... | 13 | 4 | 59 | 22 | 2 | 17 | 10 | 115 | 67 | 19 | 405 | 240 | 214 | 627 | 32 | 25 | 16 | 169 | 2,612 |
| October 23d..... | 6 | 10 | 61 | 83 | 4 | 13 | 16 | 230 | 86 | 17 | 611 | 249 | 384 | 749 | 45 | 34 | 19 | 242 | 3,535 |
| October 30th..... | 12 | 8 | 25 | 32 | 7 | 17 | 18 | 168 | 60 | 28 | 454 | 219 | 377 | 687 | 34 | 35 | 13 | 288 | 3,050 |
| November 6th..... | 6 | 11 | 31 | 190 | 2 | 13 | 26 | 257 | 41 | 17 | 727 | 263 | 292 | 577 | 71 | 17 | 26 | 135 | 3,019 |
| November 13th..... | 7 | 14 | 37 | 88 | 1 | 10 | 9 | 218 | 36 | 18 | 628 | 268 | 354 | 511 | 53 | 23 | 23 | 174 | 2,790 |
| November 20th..... | 14 | 13 | 27 | 103 | 5 | 21 | 17 | 46 | 18 | 22 | 790 | 315 | 292 | 697 | 38 | 22 | 25 | 240 | 2,895 |
| November 27th..... | 15 | 6 | 25 | 104 | 0 | 18 | 8 | 62 | 2 | 30 | 516 | 332 | 106 | 583 | 25 | 29 | 21 | 232 | 2,404 |
| December 4th..... | 16 | 11 | 26 | 102 | 6 | 16 | 3 | 54 | 4 | 49 | 846 | 490 | 317 | 609 | 29 | 28 | 17 | 202 | 3,064 |
| December 11th..... | 11 | 8 | 31 | 92 | 6 | 11 | 3 | 51 | 13 | 30 | 830 | 394 | 175 | 598 | 30 | 24 | 15 | 183 | 2,551 |
| December 18th..... | 8 | 14 | 26 | 246 | 1 | 18 | 4 | 21 | 10 | 30 | 821 | 433 | 221 | 524 | 61 | 35 | 12 | 85 | 2,800 |
| December 25th..... | 8 | 13 | 43 | 175 | 2 | 10 | 5 | 21 | 15 | 33 | 785 | 294 | 204 | 524 | 81 | 32 | 14 | 85 | 2,568 |
| December 31st..... | | | | | | | | | | | | | | | | | | | |
| Total..... | 435 | 701 | 1,614 | 3,724 | 379 | 945 | 468 | 5,953 | 2,079 | 2,727 | 17,893 | 10,280 | 16,559 | 29,063 | 1,376 | 1,188 | 1,125 | 10,423 | 122,381 |

Included in total are 15,449 cars of miscellaneous goods.

SUMMARY OF FREIGHT RECEIVED AND FORWARDED AT MINNESOTA TRANSFER.

| | 1886. | | | | 1886. | | | |
|---|-------------------|--------------------|-----------------|--|-------------------|--------------------|-----------------|-------------------|
| | Received. lbs. | Forwarded. lbs. | Totals. lbs. | | Received. lbs. | Forwarded. lbs. | Totals. lbs. | Increase. lbs. |
| St. Paul, Minneapolis & Manitoba Railway..... | 160,796,460 | 160,499,050 | 267,395,512 | | 237,391,600 | 100,162,318 | 337,463,918 | 70,168,406 |
| Chicago, Milwaukee & St. Paul Railway..... | 113,737,801 | 124,960,335 | 238,748,136 | | 130,371,069 | 208,838,004 | 339,209,073 | 100,460,937 |
| Chicago, St. Paul, Minneapolis & Omaha R. R. | 135,774,571 | 114,806,311 | 250,580,896 | | 238,431,031 | 142,396,377 | 380,827,458 | 130,246,582 |
| Northern Pacific Railroad..... | 201,623,555 | 155,320,751 | 356,944,306 | | 260,121,587 | 234,712,014 | 494,832,601 | 137,889,295 |
| Minneapolis & St. Louis Railway..... | 78,420,310 | 102,861,138 | 181,288,448 | | 111,044,453 | 110,921,683 | 221,966,136 | 40,884,688 |
| Minnesota and Northwestern Railroad..... | | | | | 41,139,357 | 30,060,508 | 71,200,365 | 34,200,365 |
| Wisconsin Central Line..... | | | | | 26,410,373 | 18,323,326 | 44,733,699 | 44,733,699 |
| Chicago, Burlington & Northern Railroad..... | | | | | 14,230,728 | 54,556,519 | 68,587,247 | 68,587,247 |
| Total..... | 690,402,704 | 604,447,594 | 1,294,957,298 | | 1,022,050,758 | 899,770,749 | 1,921,821,497 | 626,911,195 |

RIVER BUSINESS FOR THE YEAR 1886.

| | In. | Out. |
|----------------------------------|------------|--------|
| 86 Trips, Merchandise, tons..... | 48,623 | 12,288 |
| 86 Trips, Passengers..... | 10,358 | 9,750 |
| 86 Trips, Horses..... | 400 | 75 |
| Lumber, feet..... | 10,000,000 | ..... |
| Wood, cords..... | 5,500 | ..... |

CHAMBER OF COMMERCE.

CASH STATEMENT—GENERAL FUND.

RECEIPTS DURING 1886.

| | |
|-----------------------------------|------------|
| Cash on hand January 1, 1886..... | \$ 60.82 |
| General expense..... | 8.75 |
| Salary account..... | 1,200.00 |
| Fines account..... | 85.00 |
| Rents from old building..... | 912.00 |
| Annual members..... | 3,695.00 |
| Assessment perpetual members..... | 1,260.00 |
| Property fund..... | 200.00 |
| Total..... | \$7,421.57 |

DISBURSEMENTS DURING 1886.

| | |
|--|------------|
| General expense..... | \$1,019.81 |
| Salary account..... | 3,666.65 |
| Rents of old building..... | 1,200.00 |
| Paid over to property fund..... | 910.00 |
| State weather service..... | 554.50 |
| Cash on hand on December 31, 1886..... | 70.61 |
| Total..... | \$7,421.57 |

PROPERTY FUND.

RECEIPTS DURING 1886.

| | |
|-----------------------------------|-------------|
| Cash on hand January 1, 1886..... | \$ 3,301.89 |
| Perpetual membership..... | 800.00 |
| Second mortgage bonds..... | 5,076.48 |
| Rents..... | 12,937.63 |
| Building account..... | 200.00 |
| Interest account..... | 57.79 |
| Bills payable..... | 3,500.00 |
| General fund..... | 910.00 |
| H. S. Fairchild..... | 354.00 |
| Bills receivable..... | 50.00 |
| Total..... | \$27,187.79 |

ST. PAUL CHAMBER OF COMMERCE.

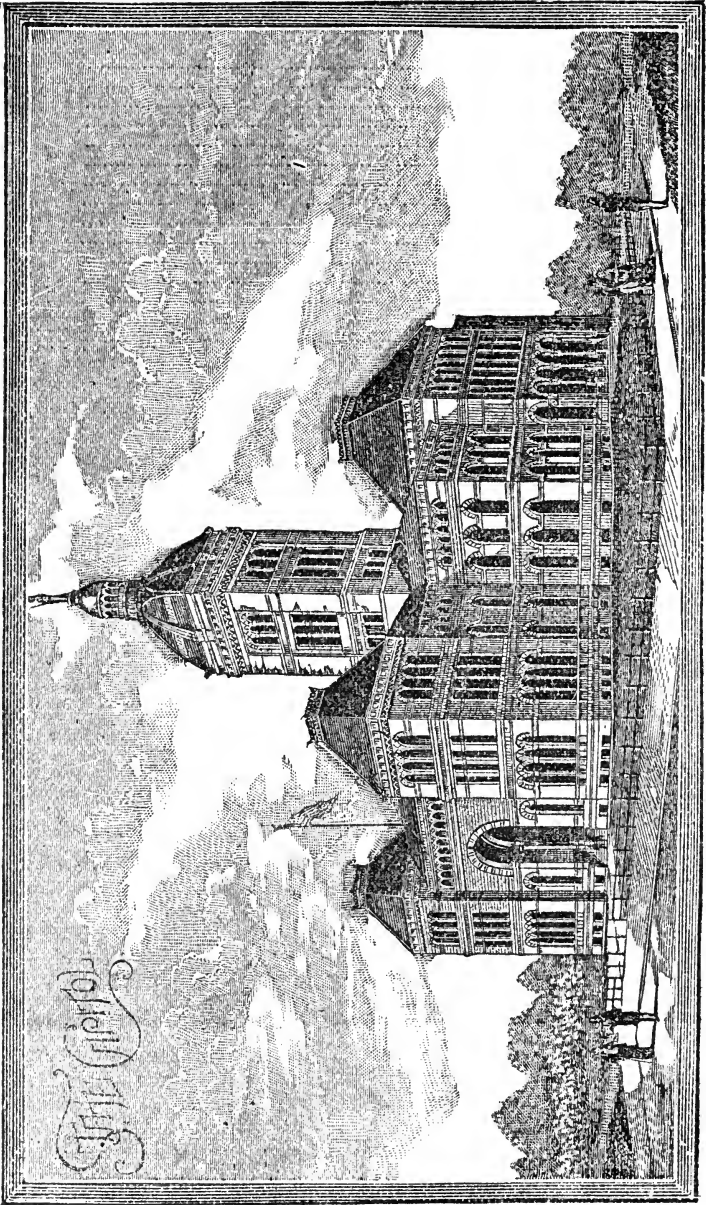


DISBURSEMENTS DURING 1886.

| | |
|--|--------------------|
| Bills payable..... | \$ 8,000.00 |
| Interest account..... | 4,532.03 |
| Property expense account..... | 5,010.43 |
| Building account..... | 2,977.94 |
| Furniture account..... | 86.25 |
| General fund..... | 200.00 |
| Taxes account..... | 1,077.50 |
| H. S. Fairchild..... | 318.00 |
| Rent account..... | 400.63 |
| National German-American Bank..... | 1,250.00 |
| St. Paul Trust Co..... | 1,800.00 |
| Insurance account..... | 901.91 |
| Cash on hand on December 31, 1886..... | 633.10 |
| Total..... | \$27,187.79 |

OFFICERS OF THE ST. PAUL CHAMBER OF COMMERCE FROM ITS ORGANIZATION TO THE CLOSE OF THE YEAR 1886.

| YEAR. | PRESIDENT. | VICE PRESIDENT. | SECRETARY. | TREASURER. |
|-------|-------------------|--|---|--------------------|
| 1867 | J. C. Burbank. | 1. H. Thompson. | R. N. McLaren, pro tem. | Wm. Dawson. |
| 1868 | J. C. Burbank. | 2. H. M. Rice. 1. H. Thompson. | J. D. Ludden. Ossian E. Dodge. | Wm. Dawson. |
| 1869 | J. C. Burbank. | 2. H. H. Sibley. 1. H. Thompson. | Ossian E. Dodge. | Wm. Dawson. |
| 1870 | J. C. Burbank. | 2. H. H. Sibley. 1. D. W. Ingersoll. | Ossian E. Dodge. | O. B. Turrell. |
| 1871 | H. H. Sibley. | 2. C. D. Strong. 1. Charles Scheffer | Ossian E. Dodge. | O. B. Turrell. |
| 1872 | H. H. Sibley. | 2. C. D. Strong. 1. Charles Scheffer | Ossian E. Dodge. | D. A. Monfort. |
| 1873 | H. M. Rice. | 2. Russell Blakeley 1. Charles Scheffer | H. T. Johns. | D. A. Monfort. |
| 1874 | H. M. Rice. | 2. Russell Blakeley 1. Charles Scheffer | H. T. Johns. | D. A. Monfort. |
| 1875 | R. W. Johnson. | 2. Charles Scheffer 1. Russell Blakeley | Alex. Johnston. H. P. Hall, pro tem | D. A. Monfort. |
| 1876 | H. M. Rice. | 1. T. J. Barney 2. C. D. Strong. | Thomas Dowse. | Wm. Dawson. |
| 1877 | H. M. Rice. | 1. D. W. Ingersoll. 2. Wm. Lindeke. | S. D. Lord, pro tem Hiram Rogers. | Wm. Dawson. |
| 1878 | H. H. Sibley. | 1. Wm. Lee. 2. Pascal Smith. | W. D. Rogers. | Ferdinand Willius. |
| 1879 | H. H. Sibley. | 1. T. J. Barney. 2. Russell Blakeley | W. D. Rogers. | Ferdinand Willius. |
| 1880 | H. H. Sibley. | 1. T. J. Barney. 2. W. L. Wilson. | W. D. Rogers. | Ferdinand Willius. |
| 1881 | John B. Sanborn. | F. Driscoll | F. A. Fogg. | W. R. Merriam. |
| 1882 | John B. Sanborn. | F. Driscoll. | F. A. Fogg. | W. R. Merriam. |
| 1883 | John B. Sanborn. | F. Driscoll. | C. A. McNeale. | Peter Berkey. |
| 1884 | John B. Sanborn. | F. Driscoll. | C. A. McNeale. | Peter Berkey. |
| 1885 | John B. Sanborn. | D. R. Noyes. | C. A. McNeale. | Peter Berkey. |
| 1886 | Russell Blakeley. | Thos. Cochran, Jr. | W. F. Phelps. C. A. McNeale, Recorder. | Peter Berkey. |



STATE CAPITOL,

LIST OF PERPETUAL MEMBERS, 1886.

| | | |
|-----------------------|------------------|----------------------|
| Andrews, C. C. | Heron, G. H. | Oppenheim, A. |
| Auerbach, M. | Higbee, C. G. | Osborne, E. F. |
| Averill, J. T. | Hill, J. J. | Perkins, W. L. |
| Bacon, G. V. | Hinkel, John G. | Postlethwaite, A. G. |
| Baker, Lewis | Holl, Matt | Pugh, A. |
| Barnum, A. K. | Hornsby, A. H. | Quinby, J. C. |
| Beaupre, B. | Humphrey, J. K. | Ramsey, Alex. |
| Benz, George | Ingersoll, D. W. | Ranney, G. H. |
| Berkey, John A. | Jefferson, R. C. | Reardon, T. |
| Berkey, Peter | Johnson, R. W. | Reilly, Philip |
| Bishop, J. W. | Kalman, A. | Rhodes, Wm. |
| Blakeley, R. | Kavanagh, P. T. | Rice, Edmund |
| Brown, E. A. | Kelliher, John | Rice, Edmund Jr. |
| Bryant, J. H. | Kelly, P. H. | Robertson, W. G. |
| Bushnell, W. M. | Kiefer, A. R. | Rogers, E. G. |
| Castle, H. A. | King, James | Ryan, Dennis |
| Chandler, J. A. | Kittson, N. W. | Sanborn, J. B. |
| Clark, Greenleaf | Lamprey U. L. | Sanborn, W. H. |
| Clarke, F. B. | Lauer, Chas. | Scheffer, A. |
| Cochran, Jr., Thos. | Lawton, A. M. | Schliek, C. H. |
| Crippen, H. S. | Lewis, R. J. | Schurmeier, T. L. |
| Culbertson, W. A. | Lienau, C. H. | Scribner, E. E. |
| Davidson, J. H. | Lindeke, Wm. | Seabury, C. |
| Davidson, W. F. | Lovering, J. L. | Sibley, H. H. |
| Dawson, Wm. | Lowry, Thomas | Simonton, Ed. |
| DeGraff, A. | Ludden, J. D. | Smith, Jr., James |
| Dickerman, C. E. | McCardy, J. J. | Smith Kingsland |
| Donaldson, W. T. | McClung, J. W. | Smith, R. A. |
| Doran, Michael | McMasters, S. R. | Somers, W. A. |
| Dorr, R. R. | McNeale, C. A. | Stickney, A. B. |
| Drake, E. F. | Mahan, I. L. | Stone, G. C. |
| Driscoll, F. | Mannheimer, E. | Stone, Lane K. |
| Edgerton, E. S. | Marshall, W. R. | Thompson, George |
| Fairchild, H. S. | Matheis, John | Thompson, H. E. |
| Finch, G. R. | Merriam, J. L. | Upham, H. P. |
| Flandrau, C. E. | Merriam, W. R. | Warner, Lucien |
| Fogg, F. A. | Merrill, D. D. | Watson, J. J. |
| Galusha, R. B. | Moffett, G. H. | West, H. D. |
| Gordon, Richards | Moon, D. H. | Wheeler, R. B. |
| Gotzian, Conrad | Moore, C. A. | Wheelock, J. A. |
| Greve, Herman | Morton, W. S. | Wilcken, F. J. |
| Gribben, J. P. | Newel, Stanford | Wilder, A. H. |
| Hale, Henry | Norton, E. S. | Willius, Ferdinand |
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ST. PAUL TO THE GREAT LAKES BY CANAL.

BY GEN. C. C. ANDREWS, OF ST. PAUL.

The latest official action in regard to a canal from the upper Mississippi to the great lakes is that of the board of United States engineers. The report of that board dated Dec. 30, 1886, and printed in Executive Document No. 65, Forty-ninth congress, second session, states as follows:

"As to the practical importance of a through route by way of the Fox and Wisconsin rivers, great changes have occurred during the past twenty-four years. Railroads have multiplied and by sharp competition between themselves may maintain rates at so low figures that it is very doubtful if an ordinary canal can compete with them so as to materially reduce rates over a route so unfavorable as that from Green Bay to the Mississippi. * * * At any rate, action should be delayed until the limit of practical improvement in the low water navigation of the Mississippi from St. Paul downward has been determined. That limit will fix the depth demanded in a canal traversing the valley of the Wisconsin."

* * *

In view of this conclusion of the engineer officers it becomes of the greatest importance that "the limit of practical improvement in the low water navigation of the Mississippi from St. Paul downward" be ascertained as soon as possible. It is the opinion of these officers that a canal from

GREEN BAY TO THE MISSISSIPPI

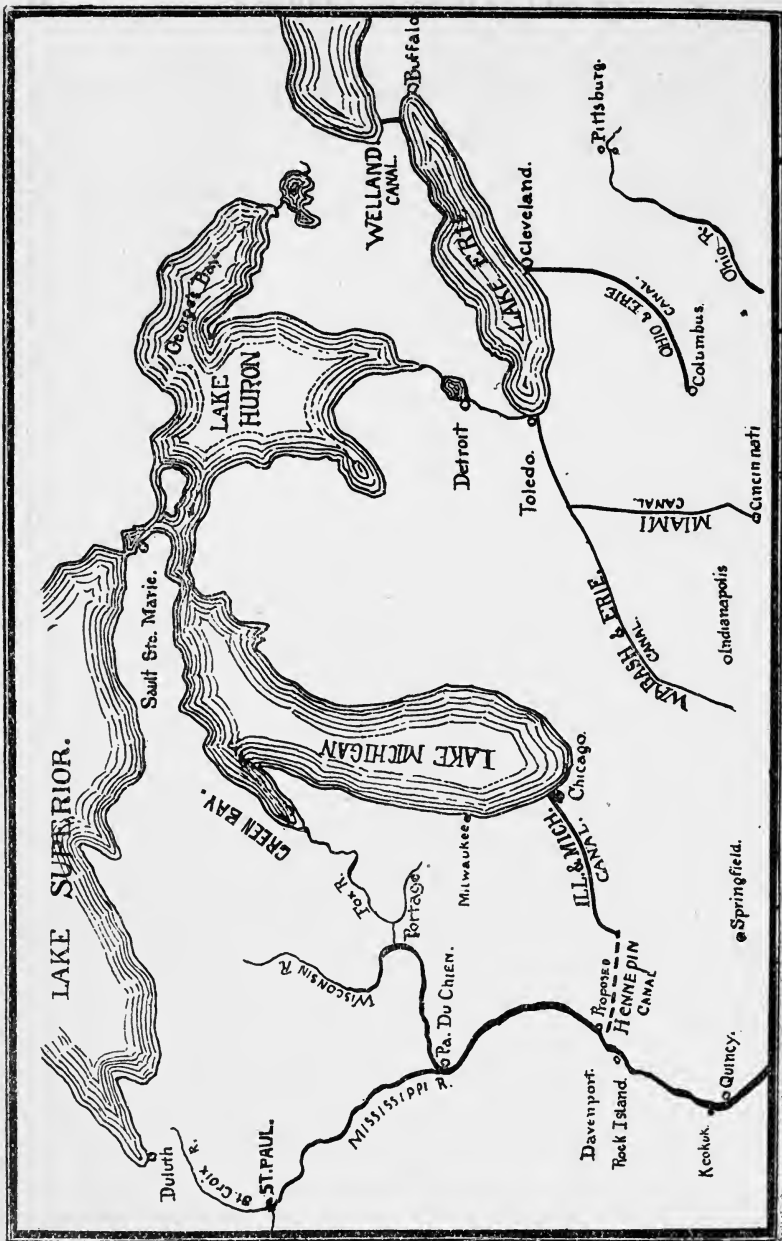
via the Fox and Wisconsin rivers should not be any deeper than the stage at which the Mississippi can be maintained at low water from St. Paul downward. It is rather to be regretted that they have not thrown some light on this immediate and important question of what the attainable maximum depth of the Mississippi will be. They say enough, however, to awaken the profound attention of all the people of the Northwest who feel the vital importance of cheap transportation; and who are thus notified that the first and great thing for them to do is to concentrate their energies in securing as deep a navigable channel in the Mississippi as possible and as soon as possible, seeing that such limit will determine the depth of a canal to Green Bay. Every community in the upper Mississippi valley should endeavor to influence public opinion in favor of this work.

The need of a canal to unite Green Bay with the Mississippi river is no longer an open question. The prairie farmers of Iowa, Minnesota and Dakota, who are paying upwards of \$12 a ton for coal, or who in lieu of coal have to burn hay for fuel, are in actual distress for lack of

CHEAP WATER TRANSPORTATION.

The residents of railroad centers like St. Paul and Minneapolis now have to pay \$2 more per ton for their coal than they would if the proposed canal were in use. At present coal is brought from Buffalo to Chicago by rail for \$1.78 per ton and from Chicago to St. Paul for \$2, making \$3.78 per ton for transportation through by railroad from Buffalo to St. Paul. By water the rate is: From Buffalo to Duluth, 50 cents per ton; dock charges at Duluth, 60 cents per ton, and from Duluth to St. Paul by rail, \$1.75 per ton; in all \$2.85 per ton. With a through water route it could be brought from Buffalo to St. Paul at about 75 cents per ton. By the time a canal could be finished and a corresponding improvement made in the navigation of the upper Mississippi, the consumption of coal will have so increased that the people to be benefited by the canal would save \$3,000,000 per year in the single item of coal.

* * *



Among the few American civil engineers whose opinion is entitled to conclusive weight was the late Edwin F. Johnson, of Connecticut. He was the builder of the first stretch of the Northwestern railroad out of Chicago and the forerunner of the Northern Pacific. No American was more far-seeing than he with reference to the needs of our country in great routes of cheap transportation. In his very able paper, entitled "The Navigation of the Lakes and Navigable Communication Therefrom to the Seaboard and to the Mississippi River," published at Hartford in 1866, he strongly advocates the construction of both the Hennepin and the Fox and Wisconsin canals. His words are: "These canals are destined to perform a most important part in relation to the trade between

THE EAST AND THE WEST,

and also in relation to the trade between the lower Mississippi and the lakes." He declares "that their construction is indispensable," that they have become "a necessity." The people of the Northwest need to be educated up to the importance and value of canals. How few there are who know the benefits Ohio has derived from the Miami canal, extending from Cincinnati to Toledo, and which, with feeders, is 282 miles long. It was completed in 1845, at a cost of \$8,062,680.80, and has more than paid for itself. From a recent communication of Col. Bachtell, chief engineer of the board of public works of Ohio, I learn that among the benefits derived from that system of canals are that they regulate the freight charges of railroad companies, thereby affording a saving of many million dollars a year to producers in the adjacent region; the water power furnished by the locks has developed manufacturing industry employing a capital of \$30,000,000, the water in nearly all cases returning to the canal below the locks. There are in Ohio eighty-eight counties, yet the twenty-seven counties crossed by the canal comprise more than half the entire wealth of the state. With regard to the Erie canal, there ought not to be a school child in our country who is ignorant of its great and widespread benefits. Though built over half a century ago by a single state, it is generally pointed to as one of the glories of the whole country.

* * *

As to the proposed canal from Green Bay to the Mississippi via the Fox and Wisconsin rivers, it has for long years been regarded by competent engineers as an exceptionally favorable route. Gen. G. K. Warren, in his report of Nov. 26, 1875, (Executive Document No. 28, first session Forty-fourth congress), says that its feasibility,

AT MODERATE EXPENSE,

has been established, that it is "the only resource," and urged "a thorough survey." In that report he says: "The examination of the Wisconsin and Fox river route in 1886 had shown that we were very well informed in every respect concerning the portion along the Lower and Upper Fox rivers and the canal at Portage; but that we had no good survey of the part along the Wisconsin river. It was designed, therefore, to make as thorough a survey as possible from the Portage canal to the Mississippi during the season of 1867." But in regard to the survey of 1867 he states, on page 63 of his report:

It was impracticable to secure information complete enough to give more than an approximate idea of proper location for a canal, and to furnish a guide for a final survey for location. * * * Therefore (he continues on page 106) in 1868 I directed examination to be continued so as to obtain a more definite idea of the margins of the flood plain, of the heights of the terraces, with a view to a survey for locating a canal and preparing estimates. In 1869 I made a reconnaissance of the valley, assisted by Jacob Blickensderfer, Jr., a distinguished civil engineer and one well versed in canal construction. The funds at my command did not admit of making a thorough survey for canal line, so we

made as good a location on our maps as the information we had allowed, and constructed an approximate profile of this line, from which to estimate the amount of excavation and embankment. * * The whole matter must be thoroughly gone over again, location surveys and comparative estimates being made before the best plan for a canal can be named.

* * *

Maj. D. C. Houston, of the engineer corps, in his report for 1875 (Report of Engineers, 1876, part III, page 399,) says: "In the absence of detailed surveys my opinion is that the proposed canal (from Portage to the Mississippi, a distance of 118 miles) would cost not less than \$10,000,000," and assuming that the improvement of the Fox river and its canal would cost \$4,000,000, in addition, he thought the building of a double track railroad would be preferable. In his report of July 11, 1877 (Report of Chief of Engineers, 1877, part 2, page 880) he says: "I concur with Maj. Warren in his recommendation that an immediate and thorough survey be made for determining the best route for a canal along the valley of the Wisconsin river." But no thorough survey for such a canal has ever yet been made and all the estimates of its cost have been mere guesses; a fact not very creditable to our government seeing that the general route is probably the most favorable to be found in our whole country. Gen. Warren, anyhow, has left on record this opinion of it:

Fortunately the unexamined facilities presented by the general line from Green Bay to the Mississippi river, of having a feeder like the Wisconsin river, discharging from 2,000 to 3,000 cubic feet of water per second at the summit level, makes it practicable to construct a canal of any capacity.

* * *

There has been some discussion of the subject of a canal between Lake Superior and the Mississippi by way of

THE ST. CROIX

river. The benefits of such a canal, if one were practicable, to a great area of the Northwest, and especially to that portion tributary to St. Paul and Minneapolis, would be immense. I have been told by an able engineer that the practicability of such a canal depends on whether the topography of the summit between the lake and the Mississippi admits of the construction of sufficient reservoirs. A survey to determine this single question could be made without much expense. The reservoirs for the Miami canal system occupy 28,000 acres. Assuming that all three of the canal routes are feasible, namely, the Hennepin (which unites the waters of Lake Michigan with the Mississippi via the Illinois river), the Fox and the Wisconsin, and the St. Croix, what should be the plan of proceeding by the friends of these measures so far as regards their construction by the general government. I think it should be, first, to concentrate effort in support of that canal which has the best show of early success. The Hennepin canal seems now to be that one. The success of that will so educate the public in favor of canals that the government will be constrained to undertake the Fox and Wisconsin canal, and when that is done it can undertake one along the St. Croix, if surveys show the route to be practicable. This is the course I would expect followed if the works were undertaken solely by the general government. But if separate states or cities cared to undertake either of the works, (and undoubtedly the St. Croix canal might with good reason be so built), they could be finished sooner. People sometimes exclaim against canals on account of their expense, but such an argument has no weight with me. If a route for a canal is feasible, then, according to the experience of all nations, the necessary expense for the construction is a wise investment. If the single State of New York more than half a century ago, and when it had but a million inhabitants, could successfully build a canal over 300 miles long, surely the United States, with the improved machinery



of the present day, can and ought to build these canals to unite the "Great Lakes" with the "Great Father of Waters." While commercial and industrial interests demand their construction we have no right to treat with indifference the military benefits they would afford in time of war.

* * *

HENNEPIN CANAL.

Under the law of Aug. 5, 1886, the Secretary of War appointed a board of three engineers of the army (Messrs. C. B. Comstock, O. M. Poe and J. C. Post) to examine "in all their relations to commerce" the Illinois and Michigan canal and the proposed Hennepin canal. In their report, which has been recently published (Executive Document No. 79, second session Forty-ninth congress) they find certain temporary objections to the general government assuming the canals, yet present abundant and conclusive proofs of the great utility of the route and the

CHEAPNESS OF WATER ROUTES

as compared with railroads. They show "that railroads cannot successfully compete with the waterway from Chicago to New York, nor with the Erie canal, in the carriage of large freights of low value per pound, except in cases where rapid transit is an important element." They show, likewise, that by the proposed Hennepin canal and the enlargement of the Illinois and Michigan canal, with locks 170 feet by 30 feet by 7 feet deep, and to admit barges that can be loaded to 600 tons, also, the Mississippi improved to six feet depth, as is intended, the rate of freight per 100 pounds from St. Paul to Chicago would fall to 4 7-10 cents as compared with 15 cents per 100 pounds, which was the rate by railway from St. Paul to Chicago in the summer of 1885. They sum up their conclusions on this head as follows :

The board, therefore, reports that in its opinion the waterway from Chicago to the Mississippi river will be valuable and useful to navigation; that it will give a waterway from Chicago to St. Paul, over which freights of low cost per pound, and not demanding the most rapid transit, can be transported at rates much below existing rates by rail, and that the influence of this waterway in reducing rates of freight will probably extend west of the Mississippi. The board is also of the opinion that the benefits to the people effected by it will exceed the cost of its construction.

This document, from which I quote, fills 169 closely printed pages, and may be perused with profit by all who are interested in the development and prosperity of the Northwest.

* * *

Recurring, in conclusion, to the route first referred to, I submit that the practical matter for people in this vicinity to address themselves to at present is to ascertain at the earliest possible period the maximum navigable depth at which the Mississippi river from St. Paul downward can be maintained during the low water season, because that will determine the depth of the Fox and Wisconsin canal.

[The following are extracts from "Special Report No. 40," by Gen. Andrews, as published by the United States Department of Agriculture, 1882.] :

The very location of all our great cities speaks to the paramount importance of navigable routes of commerce. There is scarcely a leading city in the republic but is situated on a navigable route. Not to mention those on the seaboard, how strikingly is the fact illustrated by those in the interior. Where are those commercial marts, Chicago and Milwaukee, but on Lake Michigan? Where are Buffalo, Cleveland, Toledo, and Detroit, but on the lakes? Where are those prominent cities of Pittsburgh, Cincinnati, and Louisville, but on the Ohio River? Where St. Louis, Cairo, Memphis, and New Orleans, but on the Mississippi? It is hardly necessary to bring a

mass of dry figures to show the products which crave an outlet on our inland waters, for these cities which have sprung up on their banks are fresh and significant proofs of the vast interests connected with our leading water routes.

Considering that our country is at such a safe distance from the great powers of the world that it is not liable to be mixed up with their quarrels, and is thus exempt from the burden of great standing armies and the dangers of foreign wars to which those countries are liable, it has seemed to me that she has been somewhat slow in improving her naturally magnificent water routes.

When we remember what sacrifices were made in the civil war to open and to hold the Mississippi River; what large sums were spent from first to last in operations along its shores; that numbers of the youth of the country succumbed to climatic exposures, to severe labor on fortifications, and to the perils of siege and battle, in order that the great highway might be opened; what memorial could be more fitting or more grateful, in honor of those sacrifices, than the making that river forever a safe national channel for peaceful commerce?

* * *

Repeating words used by me on another occasion, I would ask, Does it ever occur to people why the United States are free from the expense of navy yards and armed fleets on the Northern lakes, notwithstanding their opposite shores belong to a powerful foreign nation? In 1817 the United States, through Richard Rush, entered into the following arrangement with Great Britain, proclamation of which was made by President Monroe the 28th of April, 1818, namely:

The naval force to be maintained upon the American lakes by his Majesty and the Government of the United States shall be henceforth confined to the following vessels on each side; that is:

On Lake Ontario to one vessel, not exceeding 100 tons burden, and armed with one 18-pound cannon.

On the upper lakes two vessels, not exceeding like burden each, and armed with like force.

All other armed vessels on the lakes shall be forthwith dismantled, and no other vessel of war shall be there built or armed.

This important international stipulation was modestly called an "arrangement." It did not take the dignified form of a treaty, but surely no grander provision was ever introduced into a treaty. By this "arrangement" the great American lake system was dedicated to peace. As one result from it our government has been relieved from naval expenditures of many million dollars. President Monroe, in his annual message of 1817, did not exaggerate in saying:

By this arrangement useless expense to both sides, and, what is of still greater importance, the danger of collision between armed vessels in these inland waters, which was great, is prevented.

Previous to this "arrangement" there were nine British war vessels on those waters, capable of carrying 300 guns, though not all were in use. The United States had the year previous to this "arrangement" on Lake Ontario twelve war vessels, with capacity for 360 guns; on Lake Erie six war vessels, with capacity for 108 guns; and on Lake Champlain seven war vessels, with capacity for 100 guns; though all the vessels of course were not afloat.

It is safe to say that by this statesmanlike and beneficent disarmament of the Northern lakes, which has been in effect for over half a century, the United States has saved in naval expenditure more than five times as much as would be required to put their navigable capacity within the reasonable requirements of commerce. Does not such a fact render it all the more imperative in our government promptly to improve the Northern lake navigation as fully and thoroughly as practicable?

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